ORDER NO. VRD9207M140

Service Manual

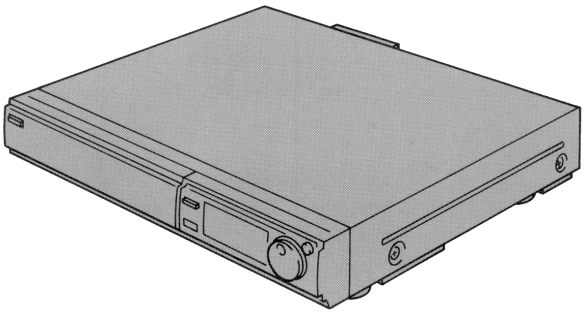
General Description
Adjustment Procedures
Block / Schematic Diagrams
Exploded Views / Parts List

Panasonic S-VHS VHS PAL 625

Hi-Fi HQ

Video Cassette Recorder

NV-FS88EE



SPECIFICATIONS/ ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ
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GENERAL DESCRIPTIONS/ ОСНОВНЫЕ ПРИМЕЧАНИЯ
- TECHNICAL INFORMATION/ ТЕХНИЧЕСКАЯ ИНФОРМАЦИЯ

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- LUMINANCE & CHROMINANCE BLOCK DIAGRAM/ БЛОК-СХЕМА КАНАЛОВ ЯРКОСТИ И ЦВЕТА
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- LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM/ ПРИНЦИПИАЛЬНАЯ СХЕМА КАНАЛОВ ЯРКОСТИ И ЦВЕТА (ДОПОЛНИТЕЛЬНАЯ)
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- HEAD AMP SCHEMATIC DIAGRAM/ ПРИНЦИПИАЛЬНАЯ СХЕМА УСИЛИТЕЛЯ ВИДЕОГОЛОВОК
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- TV DEMODULATOR PACK SCHEMATIC DIAGRAM/ ПРИНЦИПИАЛЬНАЯ СХЕМА TV ДЕМОДУЛЯТОРА
- MULTI DECODER PACK SCHEMATIC DIAGRAM/ ПРИНЦИПИАЛЬНАЯ СХЕМА МНОГОФУНКЦИОНАЛЬНОГО ДЕКОДЕРА

EXPLODED VIEWS & PARTS LIST/ СБОРОЧНЫЕ ЧЕРТЕЖИ И СПИСОК ЗАПАСНЫХ ЧАСТЕЙ
- EXPLODED VIEWS & MECHANICAL REPLACEMENT PARTS LIST/ СБОРОЧНЫЕ ЧЕРТЕЖИ И СПИСОК МЕХАНИЧЕСКИХ ЗАПАСНЫХ ЧАСТЕЙ
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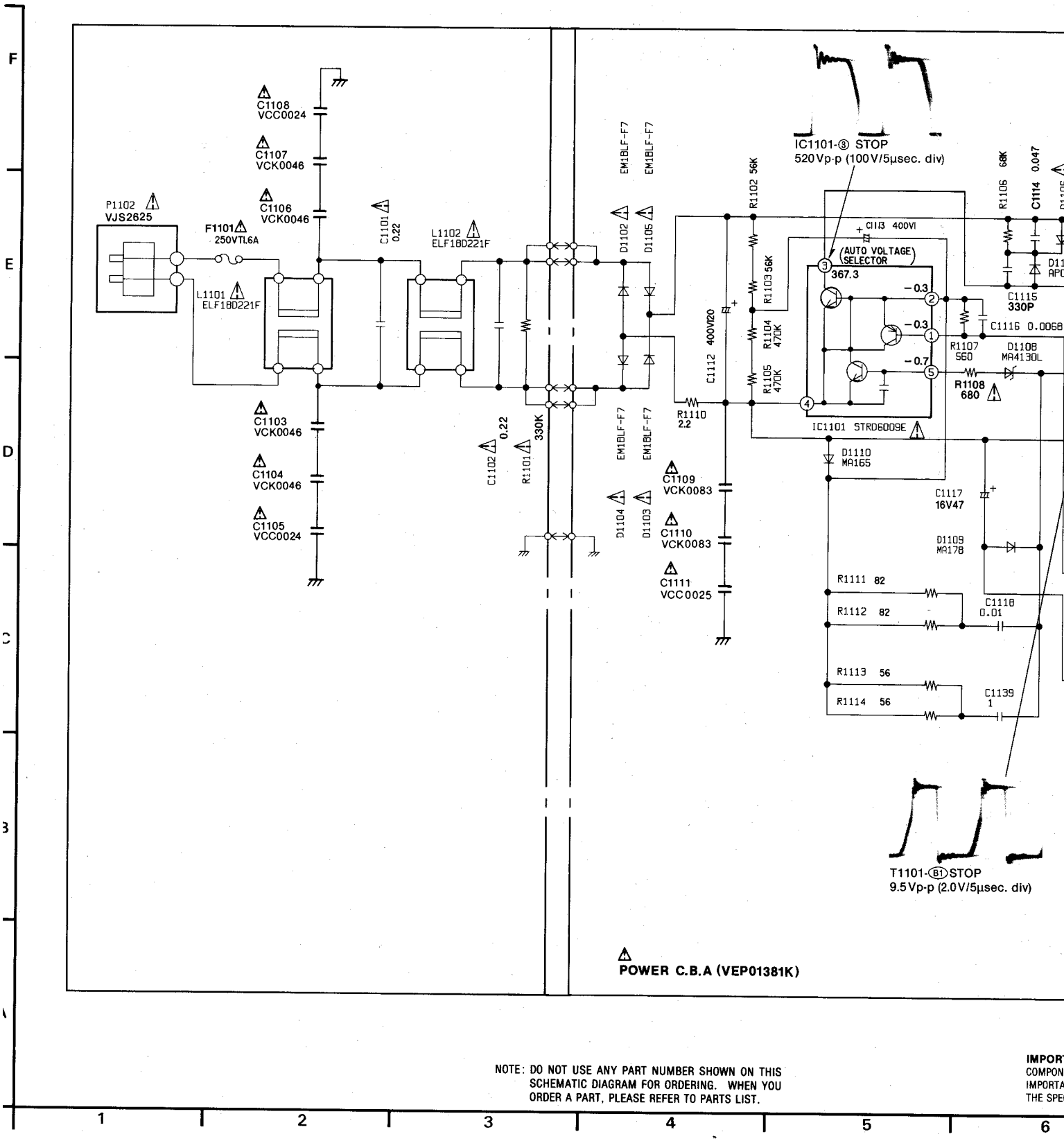
  - CASSETTE UP MECHANISM SECTION/ КАССЕТНЫЙ МЕХАНИЗМ
  - CASING PARTS SECTION/ КОРПУС
  - PACKING PARTS SECTION/ УПАКОВКА
- ELECTRICAL REPLACEMENT PARTS LIST/ СПИСОК ЭЛЕКТРИЧЕСКИХ ЗАПАСНЫХ ЧАСТЕЙ

Panasonic

SECTION 4
SCHEMATIC DIAGRAMS

4-1. POWER SCHEMATIC DIAGRAM



NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

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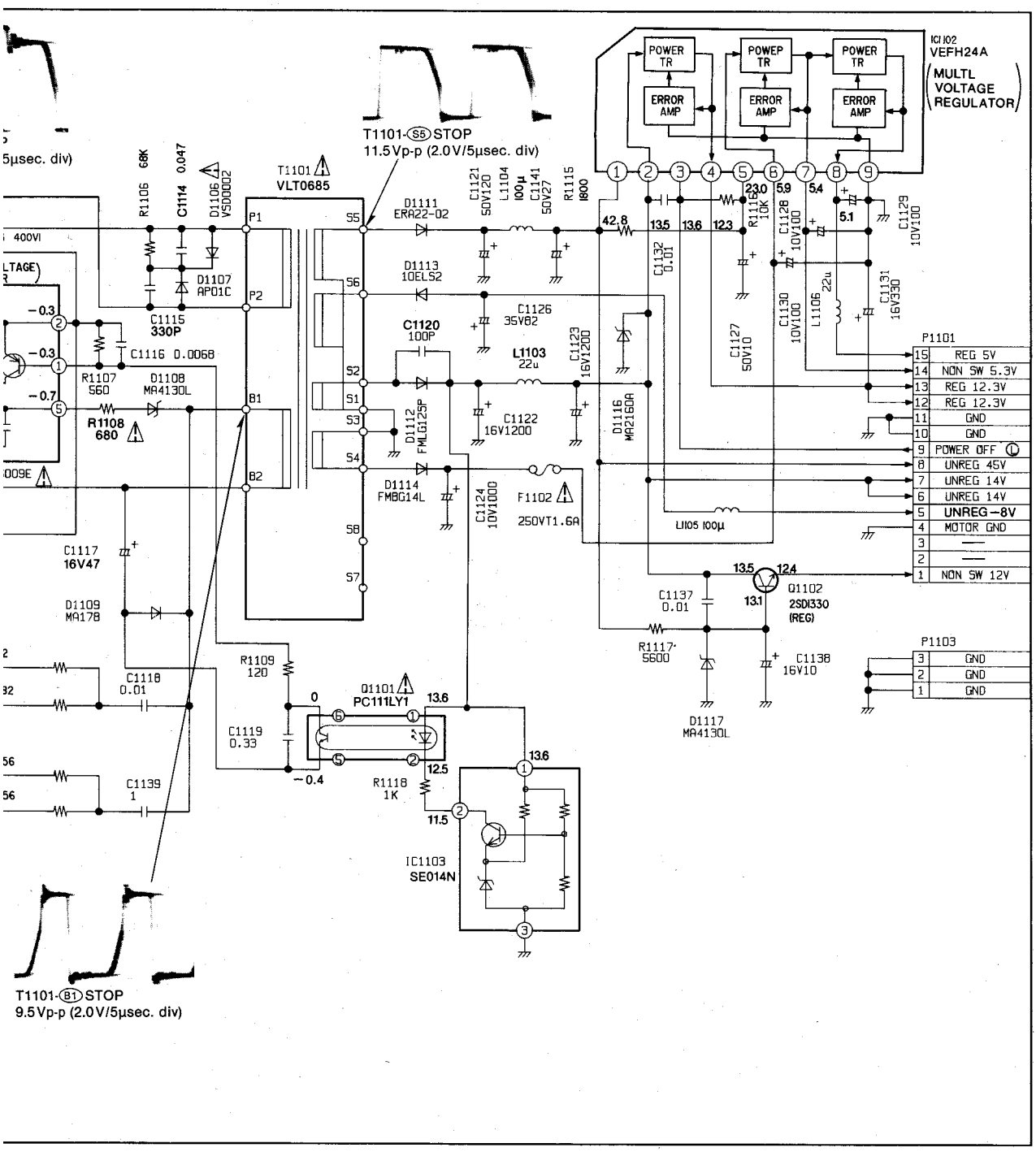
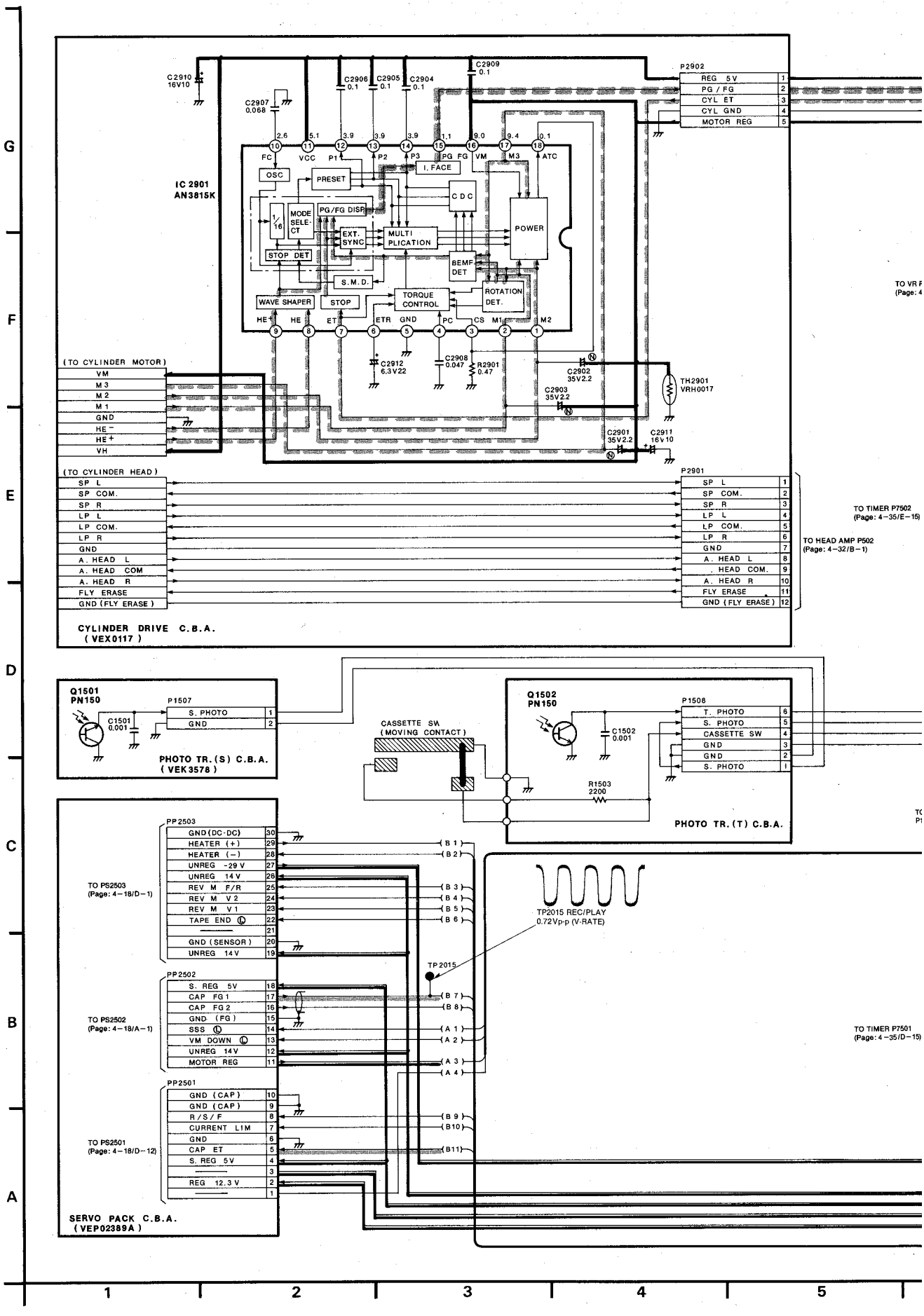


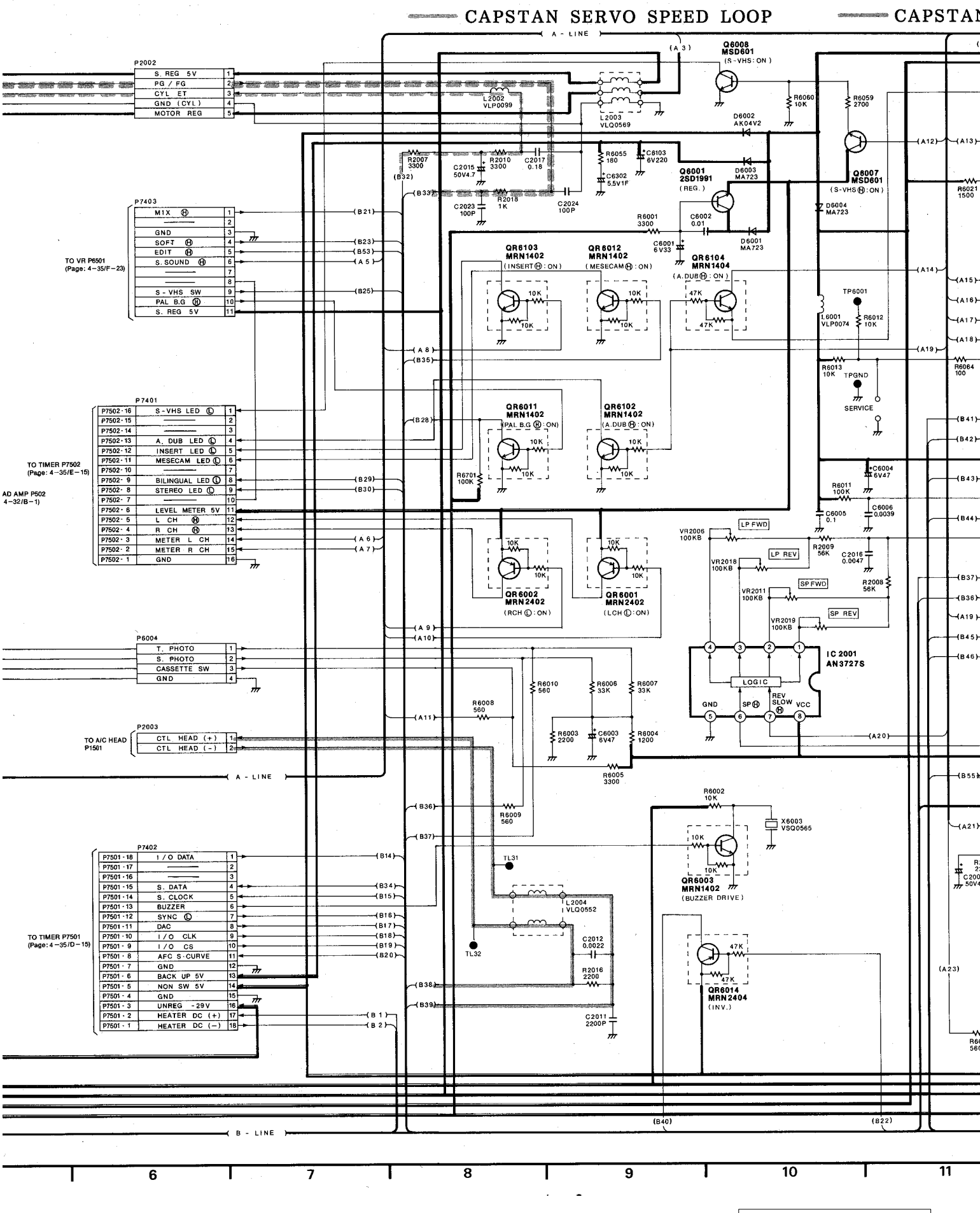
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

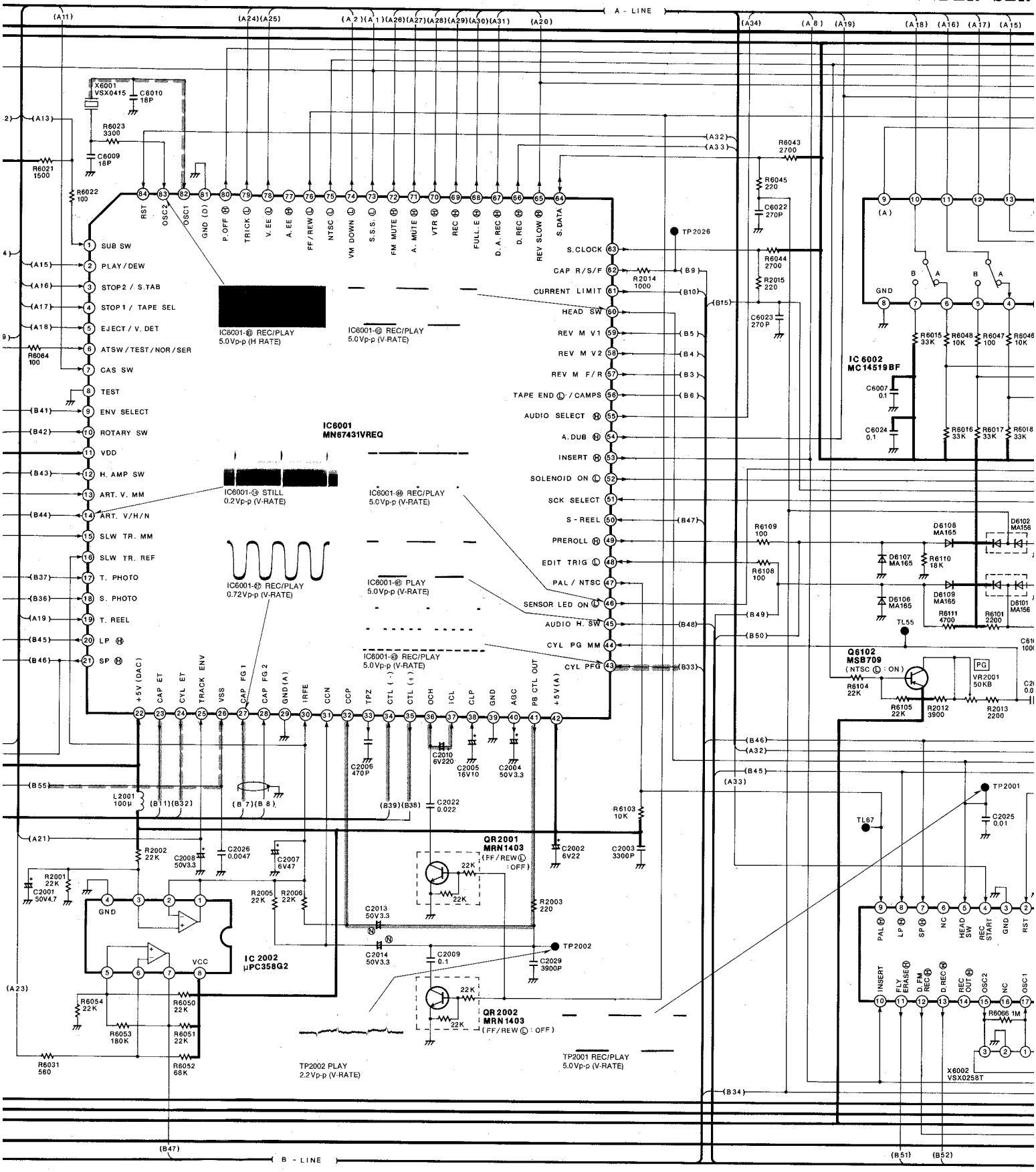
NOTE 1. WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT, SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE ..... IC1101-(4)
SECONDARY SIDE ... TP GND OF MAIN C.B.A.
NOTE 2. THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 220V.

4-2. SYSTEM CONTROL & SERVO SECTION IN MAIN SCHEMATIC I

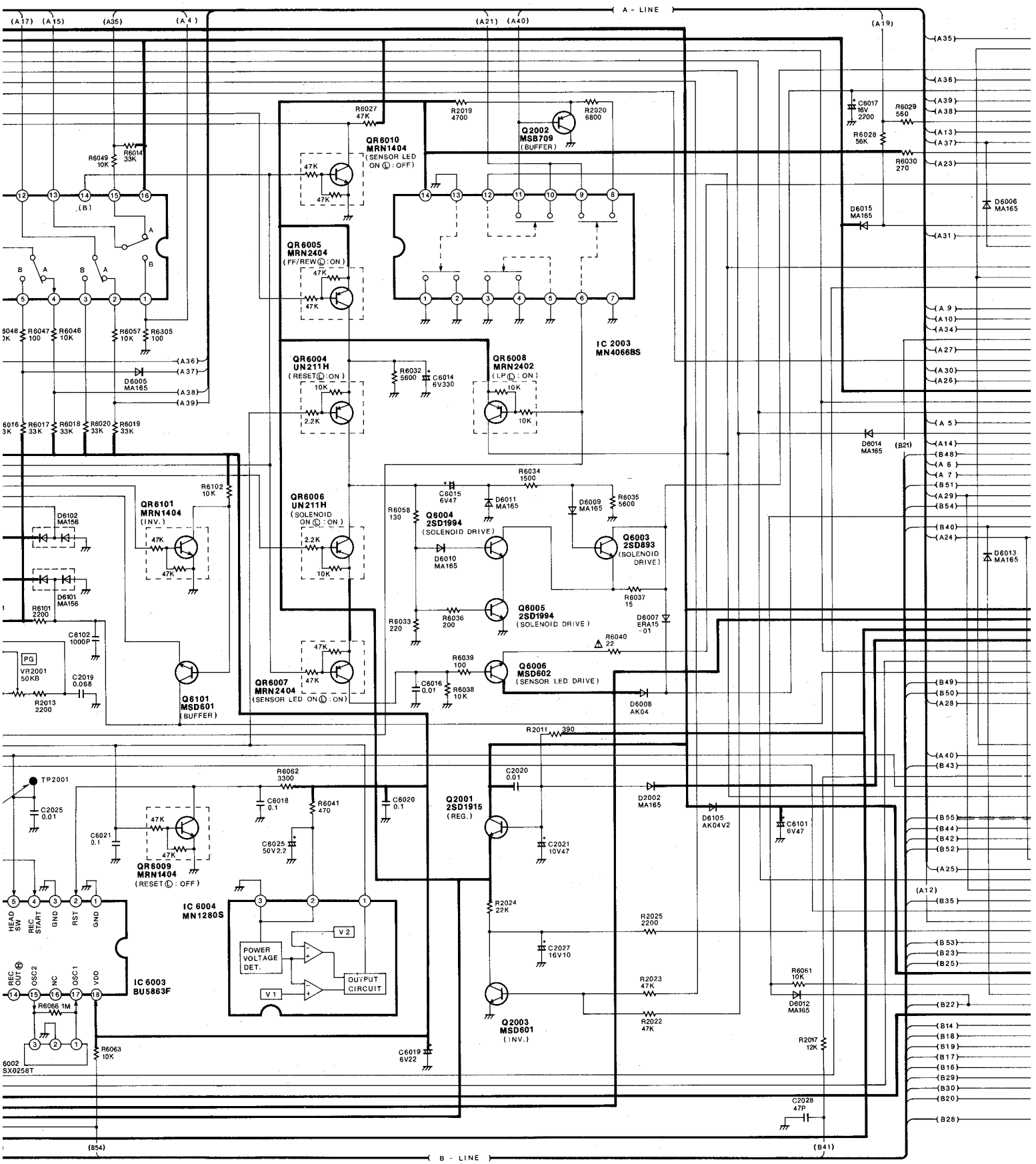


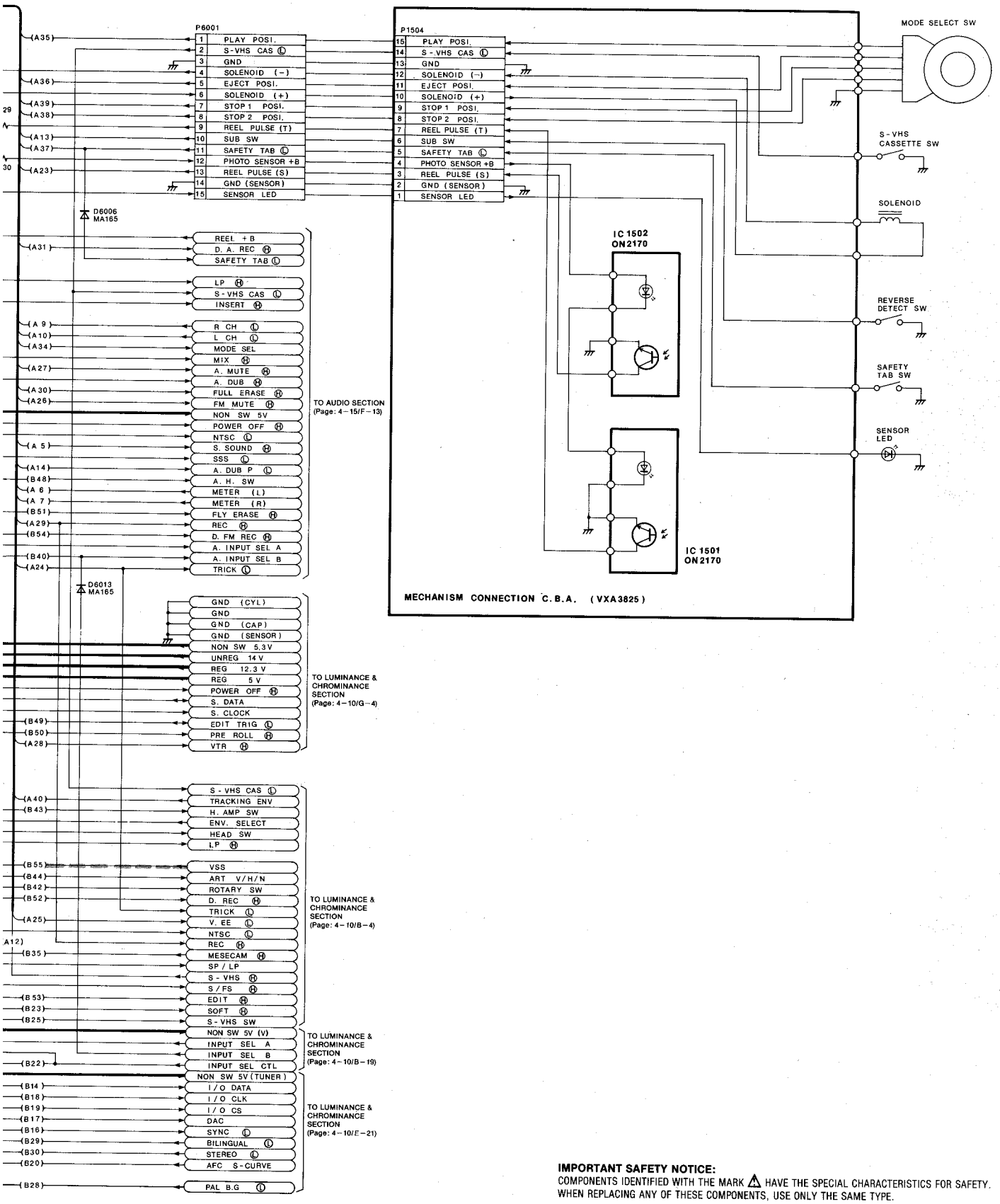
IATIC DIAGRAM




PSTAN SERVO PHASE LOOP
CYLINDER SERVO SPEED LOOP
CYLINDER SER
A - LINE
B - LINE
IC6001
MN87431VREQ
IC 2002
μPC358G2
IC 6002
MC14519BF
Q6102
MSB709
QR2001
MRN1403
QR2002
MRN1403
X6001
VSX0415
X6002
VSX0258T
TP2026
TP2001
TP2002
SUB SW
PLAY / DEW
STOP2 / S.TAB
STOP1 / TAPE SEL
EJECT / V. DET
ATSW / TEST / NOR / SER
CAS SW
TEST
ENV SELECT
ROTARY SW
VDD
H. AMP SW
ART. V. MM
ART. V/H/N
SLW TR. MM
SLW TR. REF
T. PHOTO
S. PHOTO
T. REEL
LP
SP
S.CLOCK
CAP R/S/F
CURRENT LIMIT
HEAD SW
REV M V1
REV M V2
REV M F/R
TAPE END / CAMPS
AUDIO SELECT
A.DUB
INSERT
SOLENOID ON
SCK SELECT
S - REEL
PREROLL
EDIT TRIG
PAL / NTSC
SENSOR LED ON
AUDIO H. SW
CYL PG MM
CYL PFG
IC6001-⑧ REC/PLAY 5.0Vp-p (H RATE)
IC6001-⑩ REC/PLAY 5.0Vp-p (V-RATE)
IC6001-⑭ STILL 0.2Vp-p (V-RATE)
IC6001-⑯ REC/PLAY 5.0Vp-p (V-RATE)
IC6001-⑰ REC/PLAY 0.72Vp-p (V-RATE)
IC6001-⑮ PLAY 5.0Vp-p (V-RATE)
IC6001-㊸ REC/PLAY 5.0Vp-p (V-RATE)
TP2002 PLAY 2.2Vp-p (V-RATE)
TP2001 REC/PLAY 5.0Vp-p (V-RATE)
11
12
13
14
15
16
17

ER SERVO PHASE LOOP

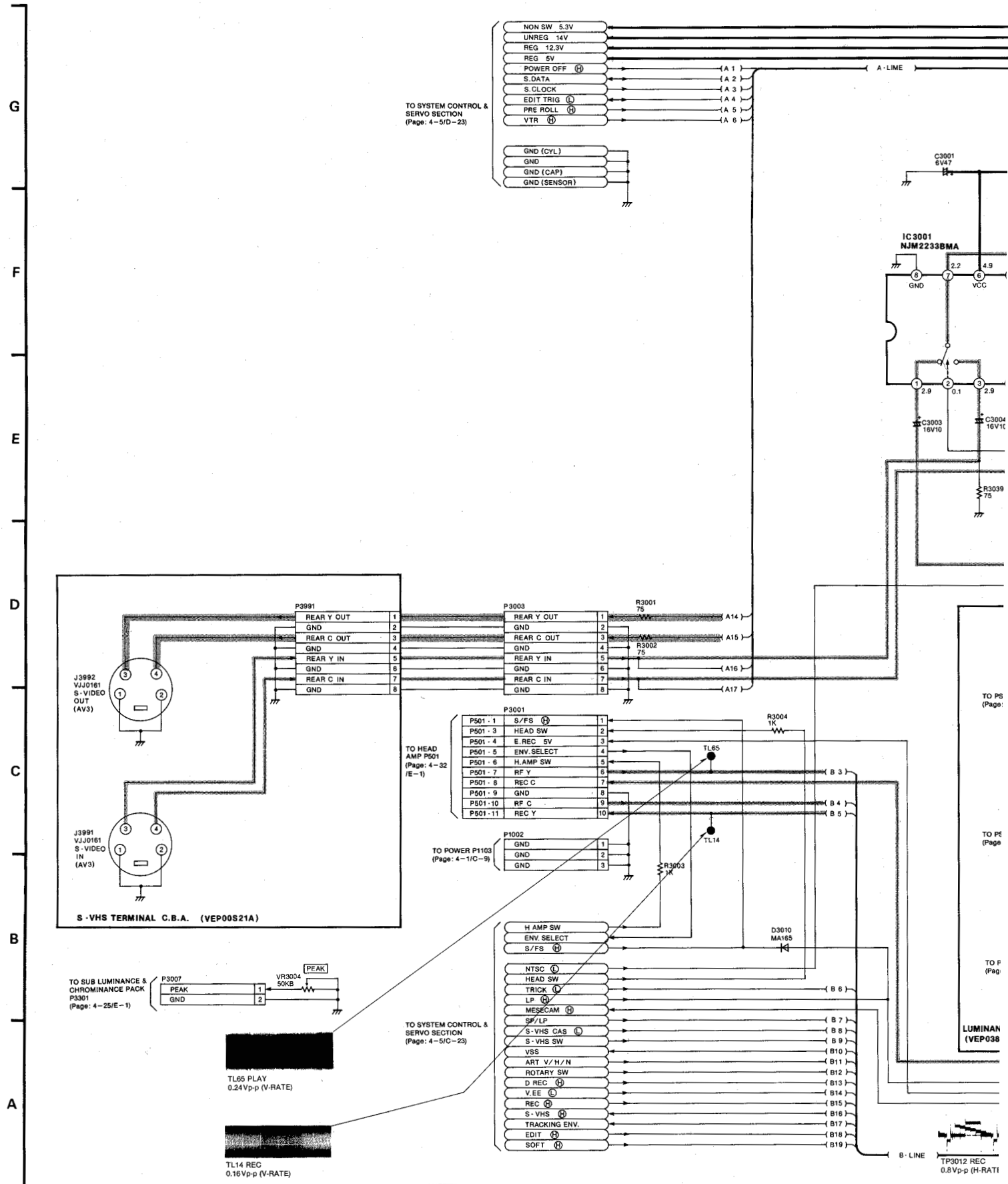




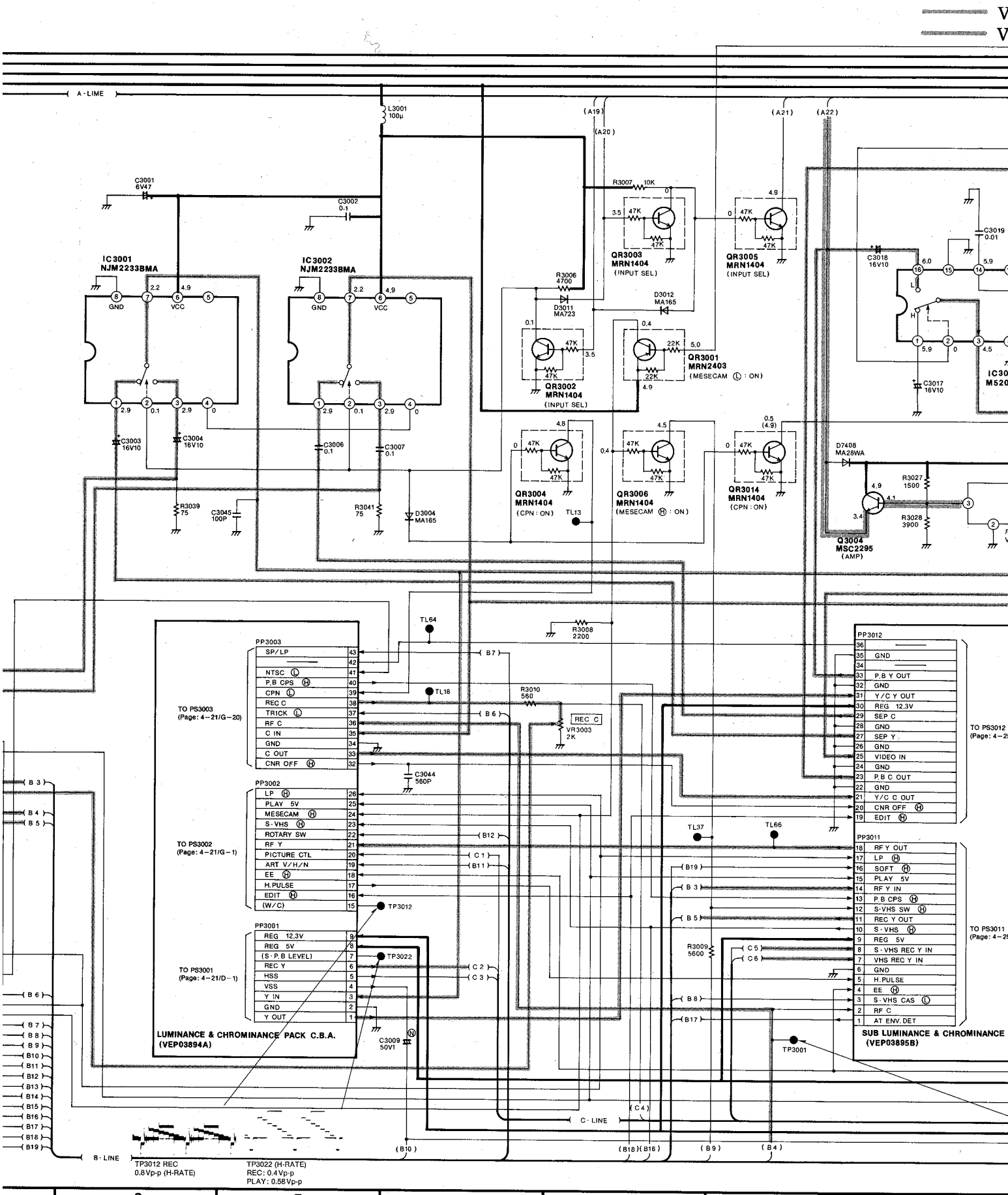
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

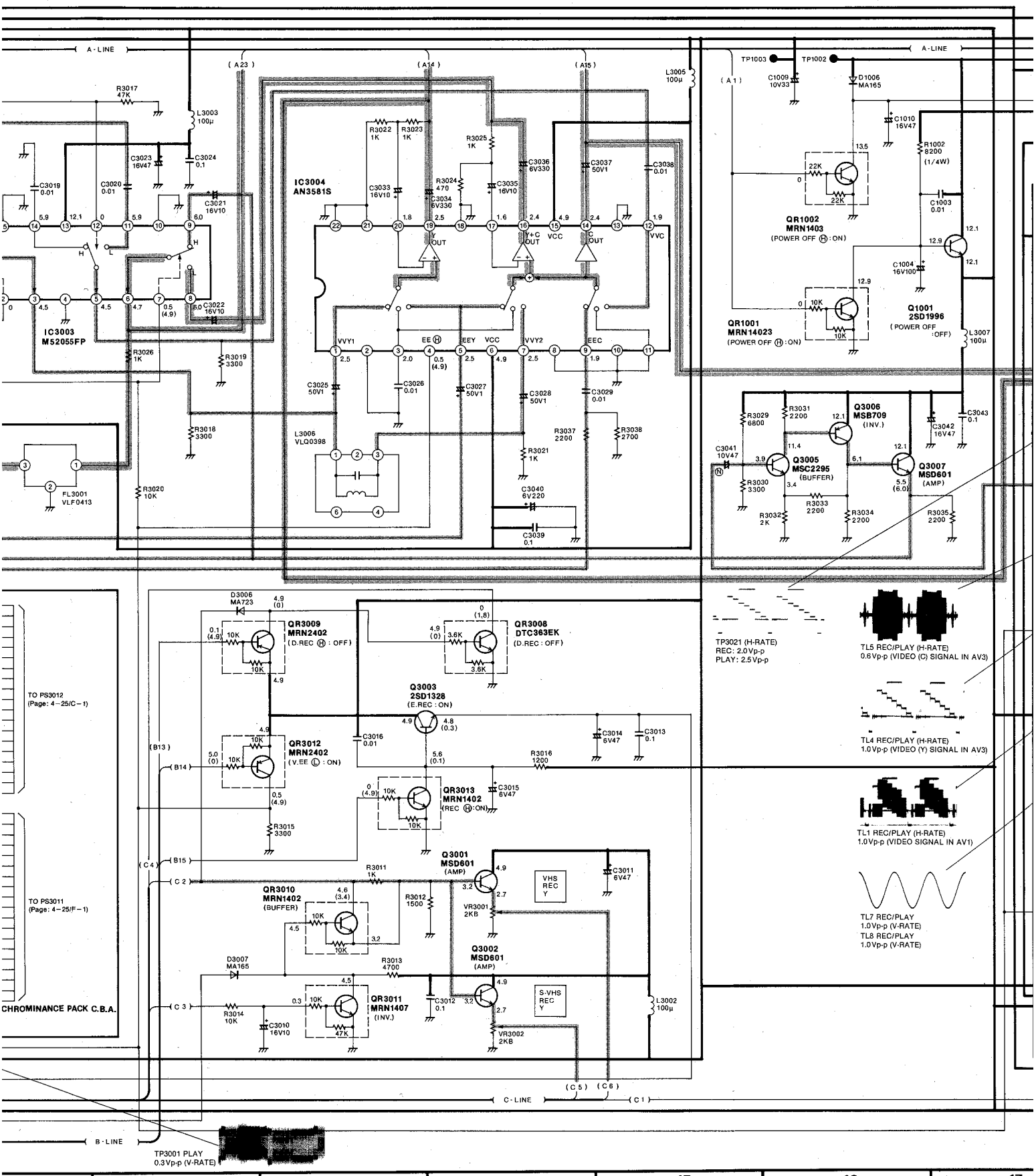
4-3. LUMINANCE & CHROMINANCE SECTION IN MAIN SCHEMATIC DIAGRA



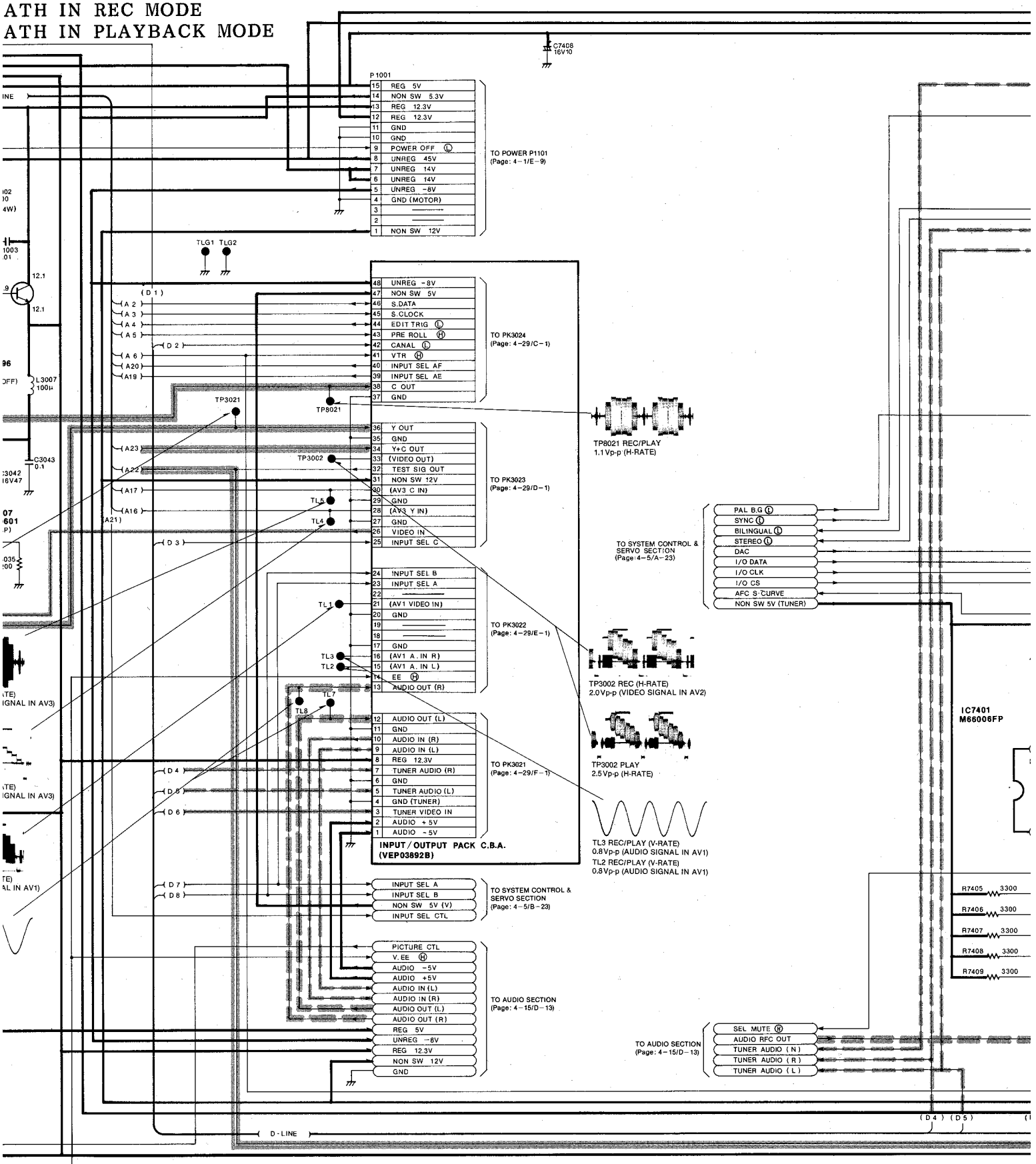
:MATIC DIAGRAM



VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN R
AUDIO MAIN SIGNAL PATH IN P



ATH IN REC MODE
ATH IN PLAYBACK MODE



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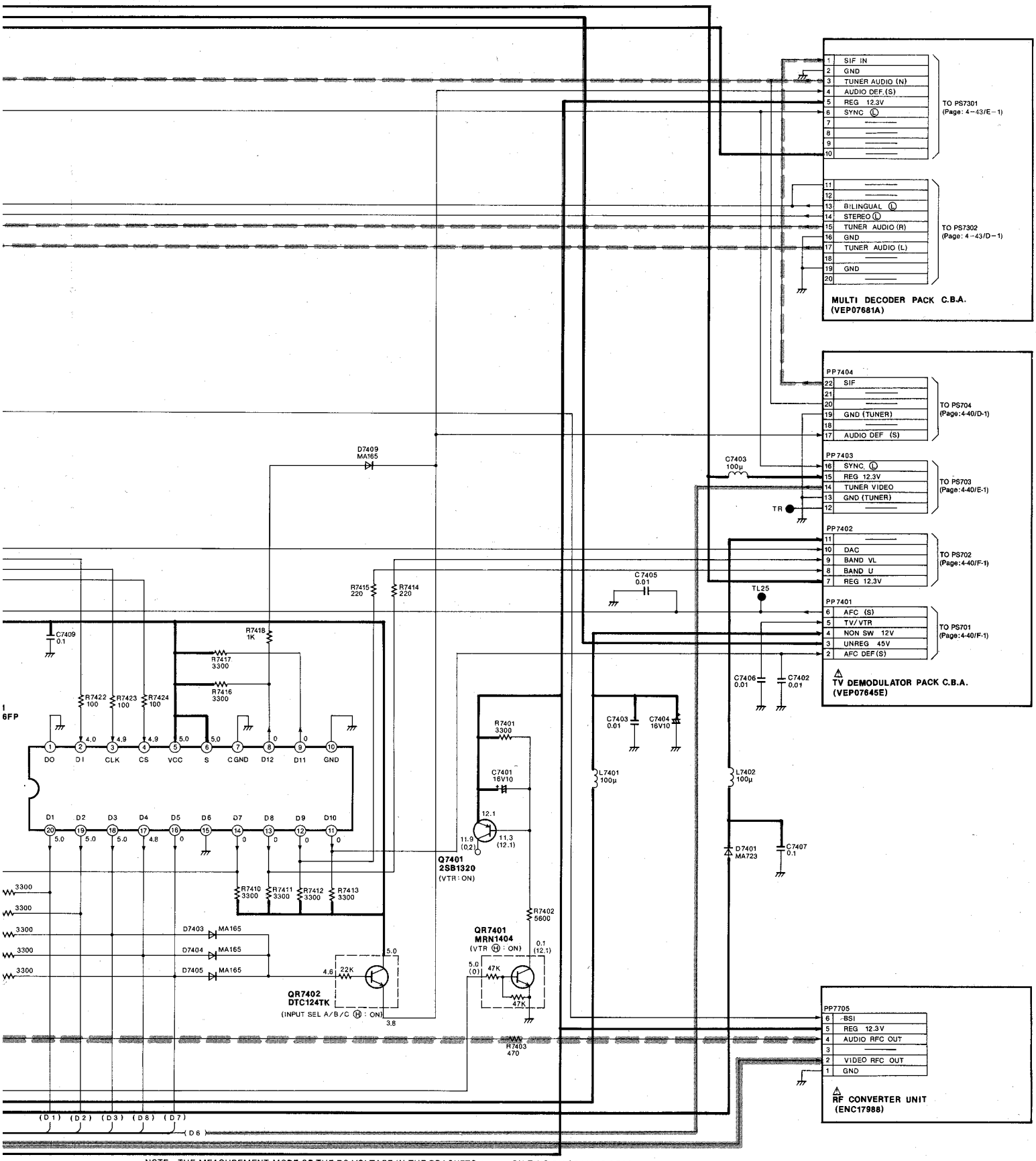
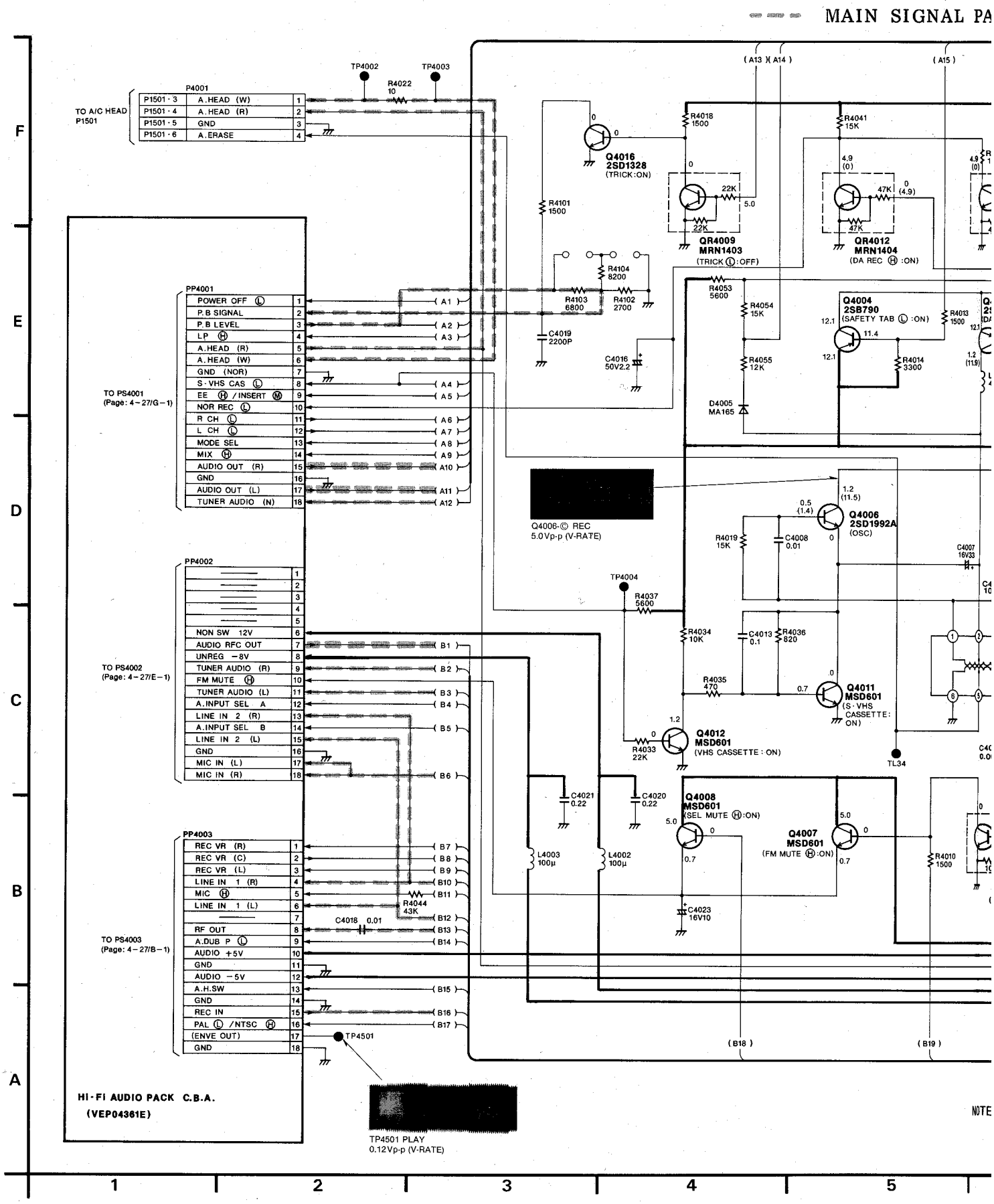


NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

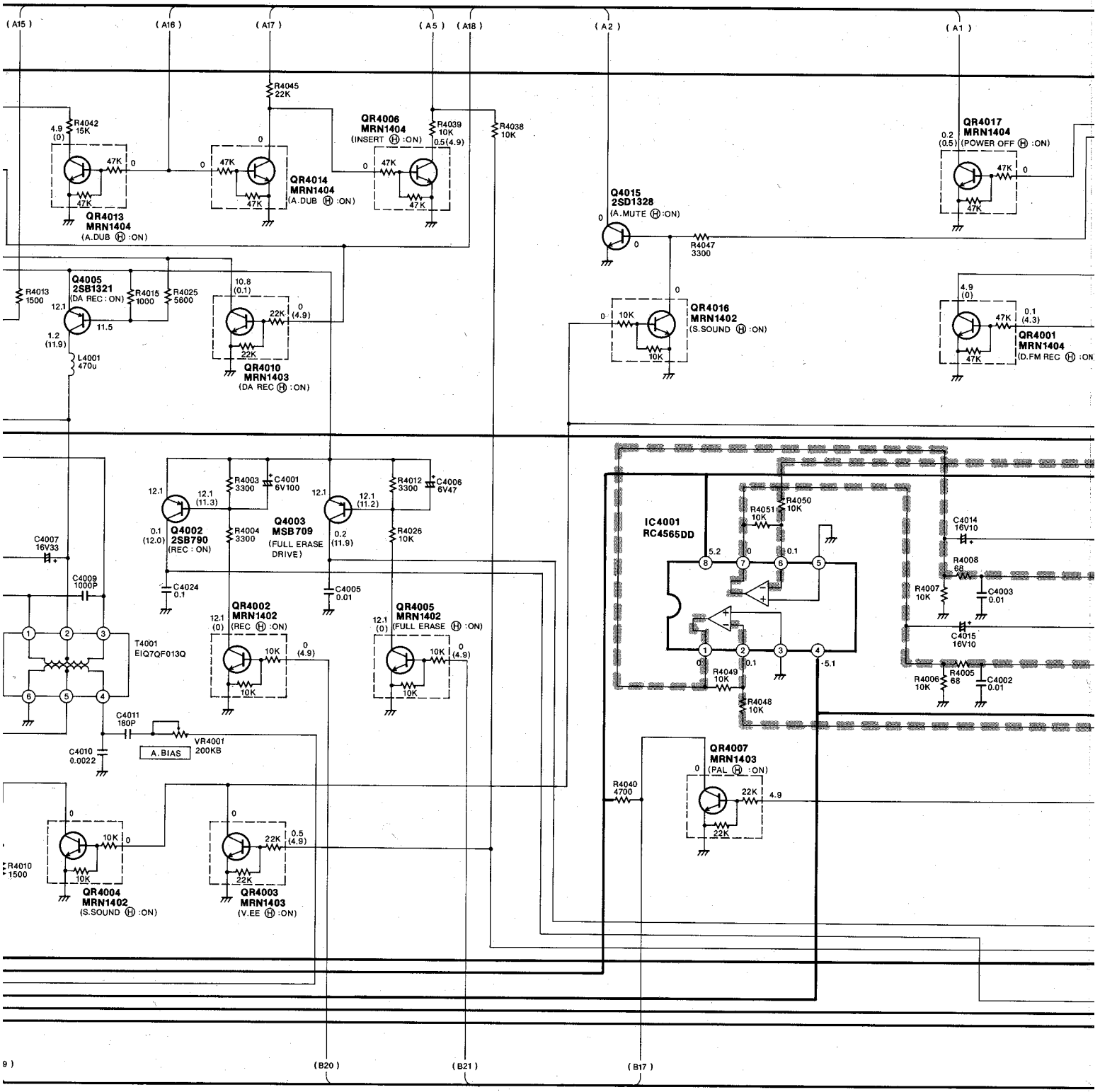
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

STICS FOR SAFETY.

4-4. AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM

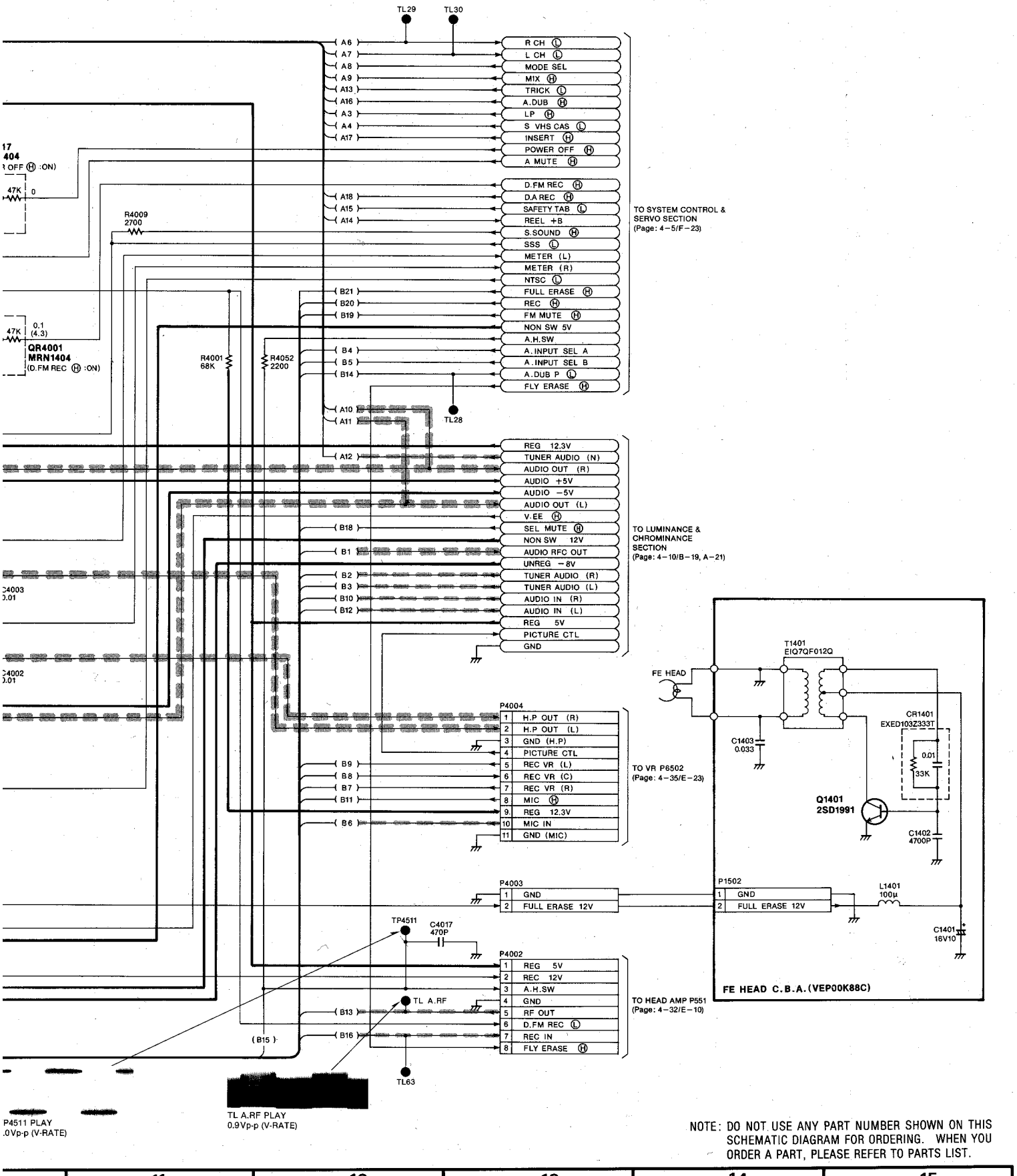


NAL PATH IN REC MODE — — — MAIN SIGNAL PATH IN PLAYBACK MODE



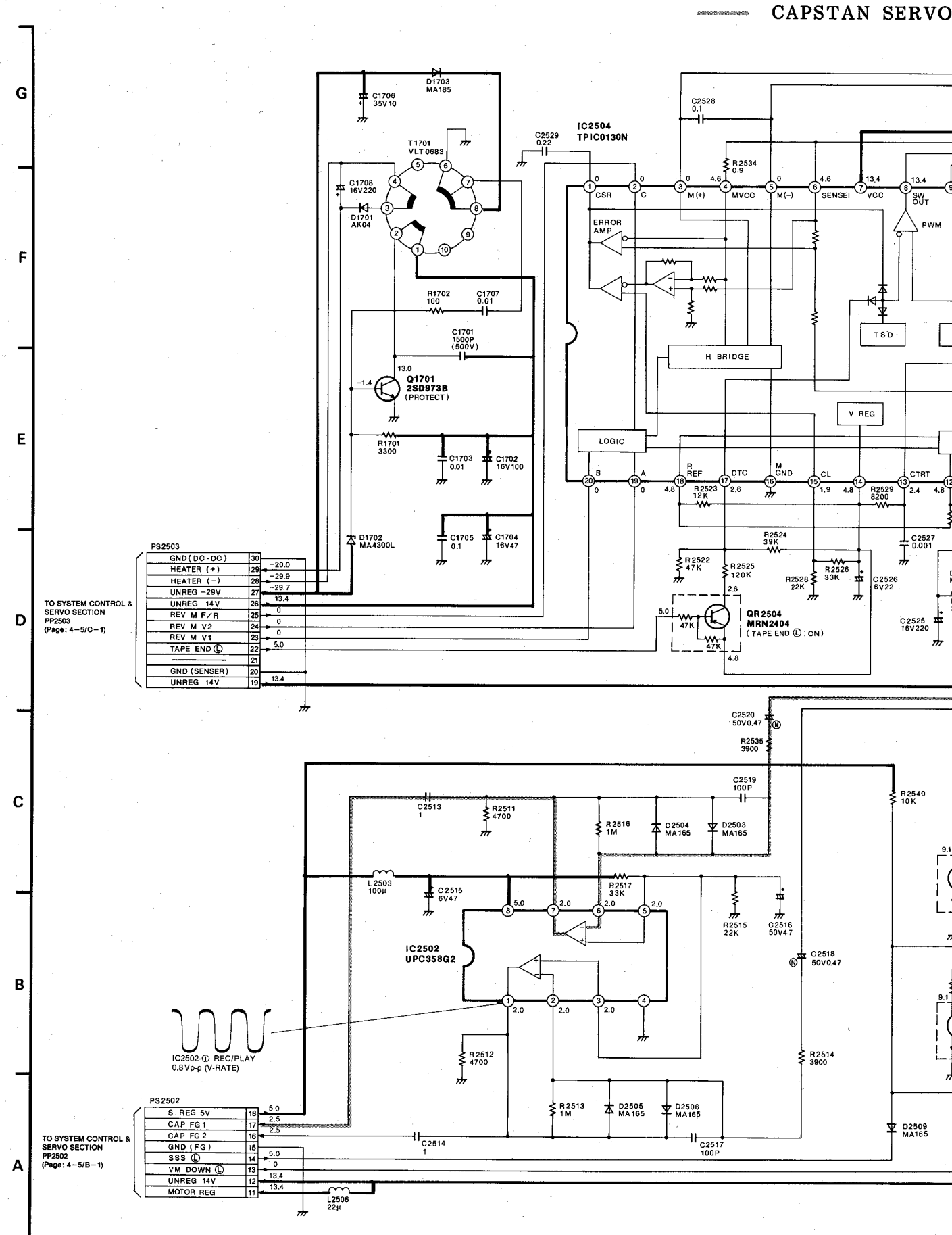
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE) • LINE IN SIGNAL LEVEL... −10dB 1kHz
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

TP4511 PLAY
5.0Vp-p (V-RATE)

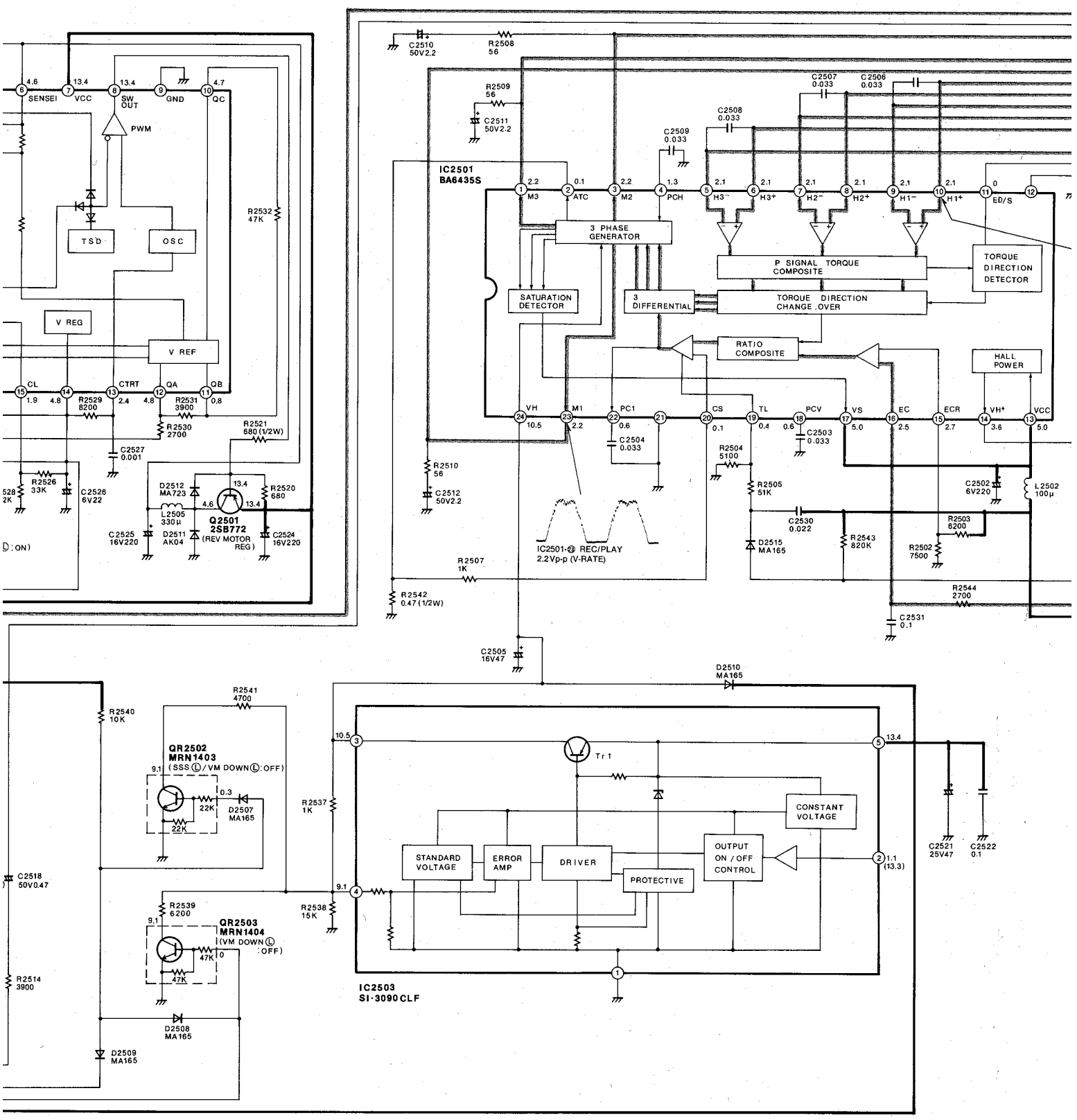


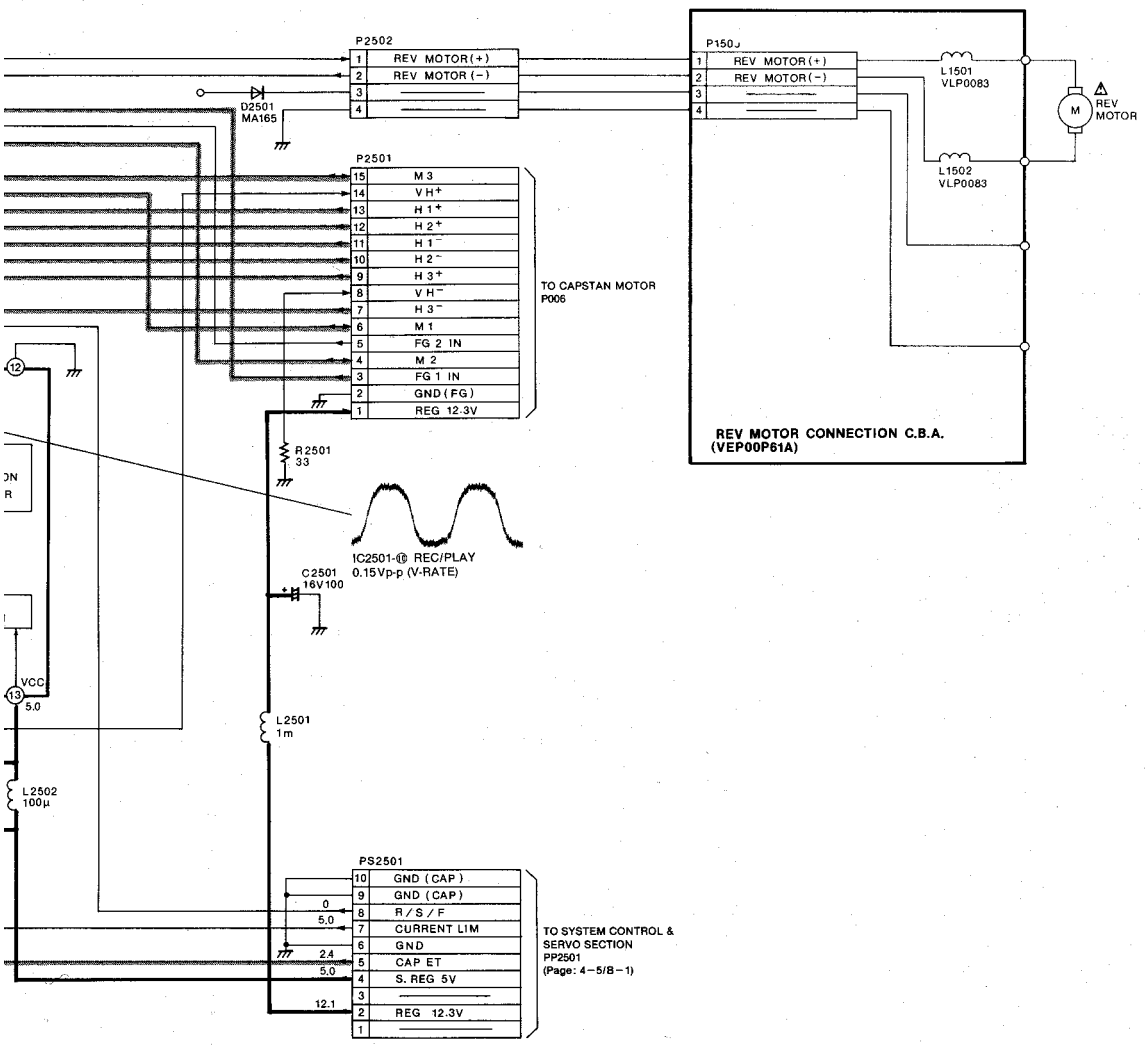
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-5. SERVO PACK SCHEMATIC DIAGRAM



APSTAN SERVO SPEED LOOP





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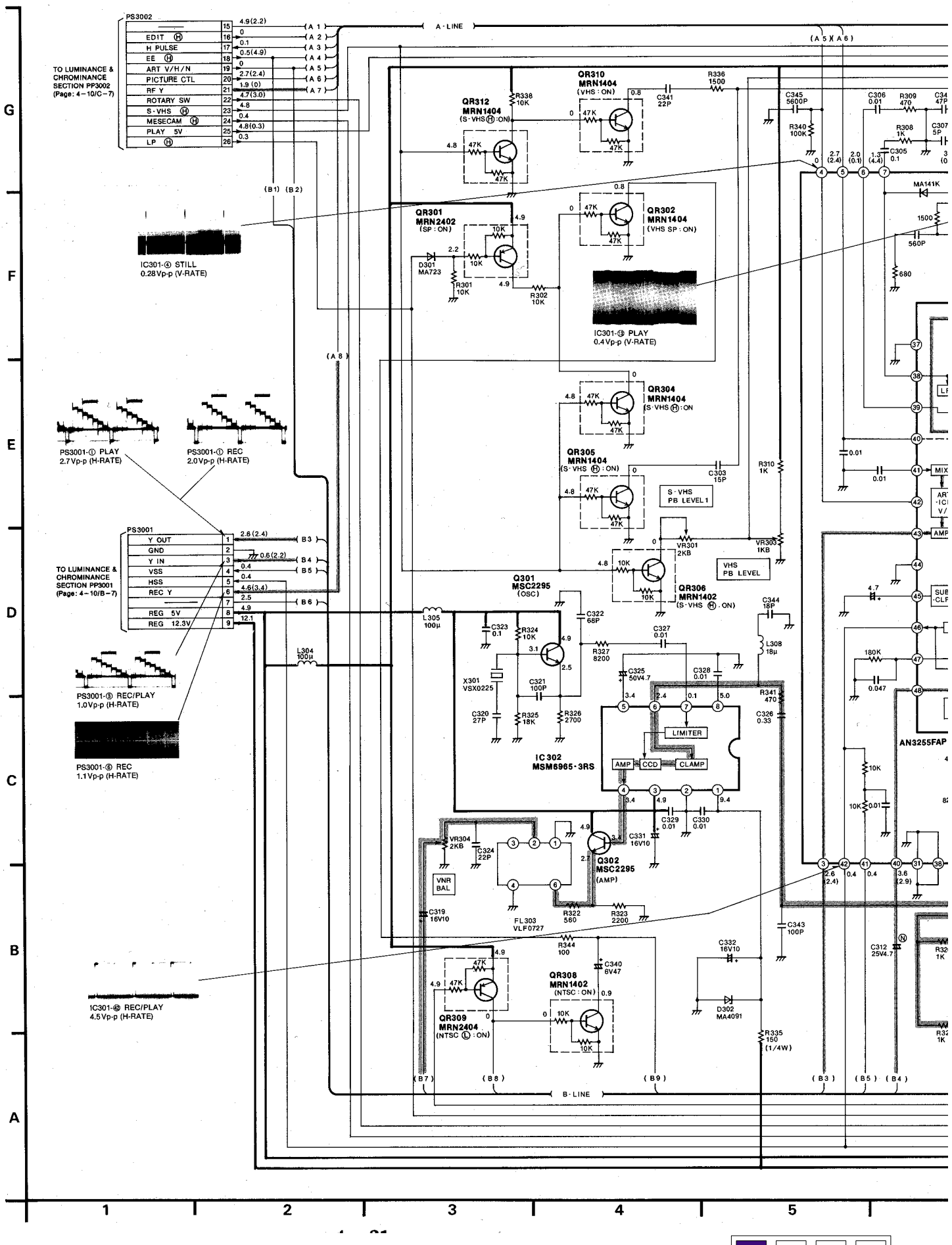
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

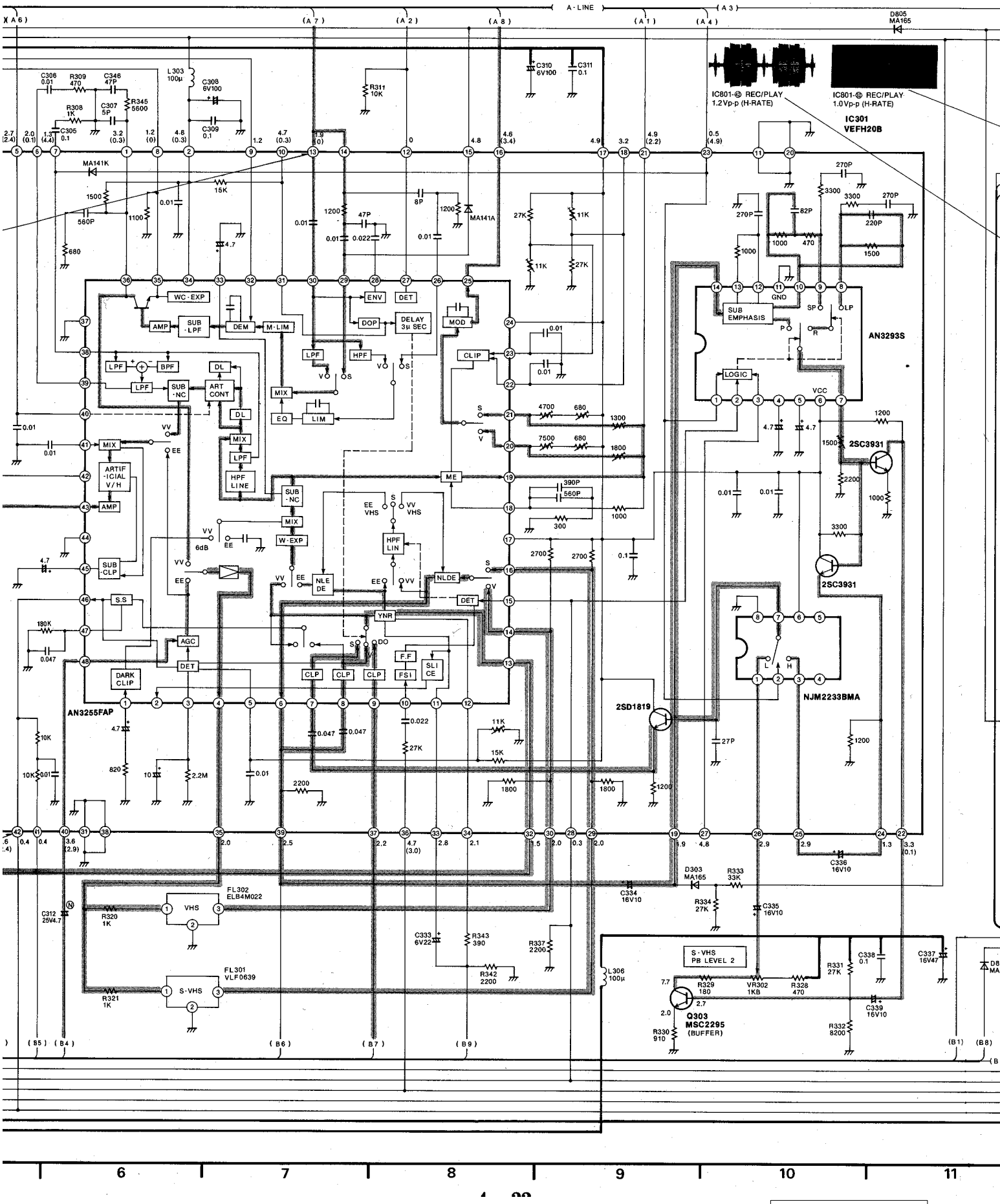
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

4-6. LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM

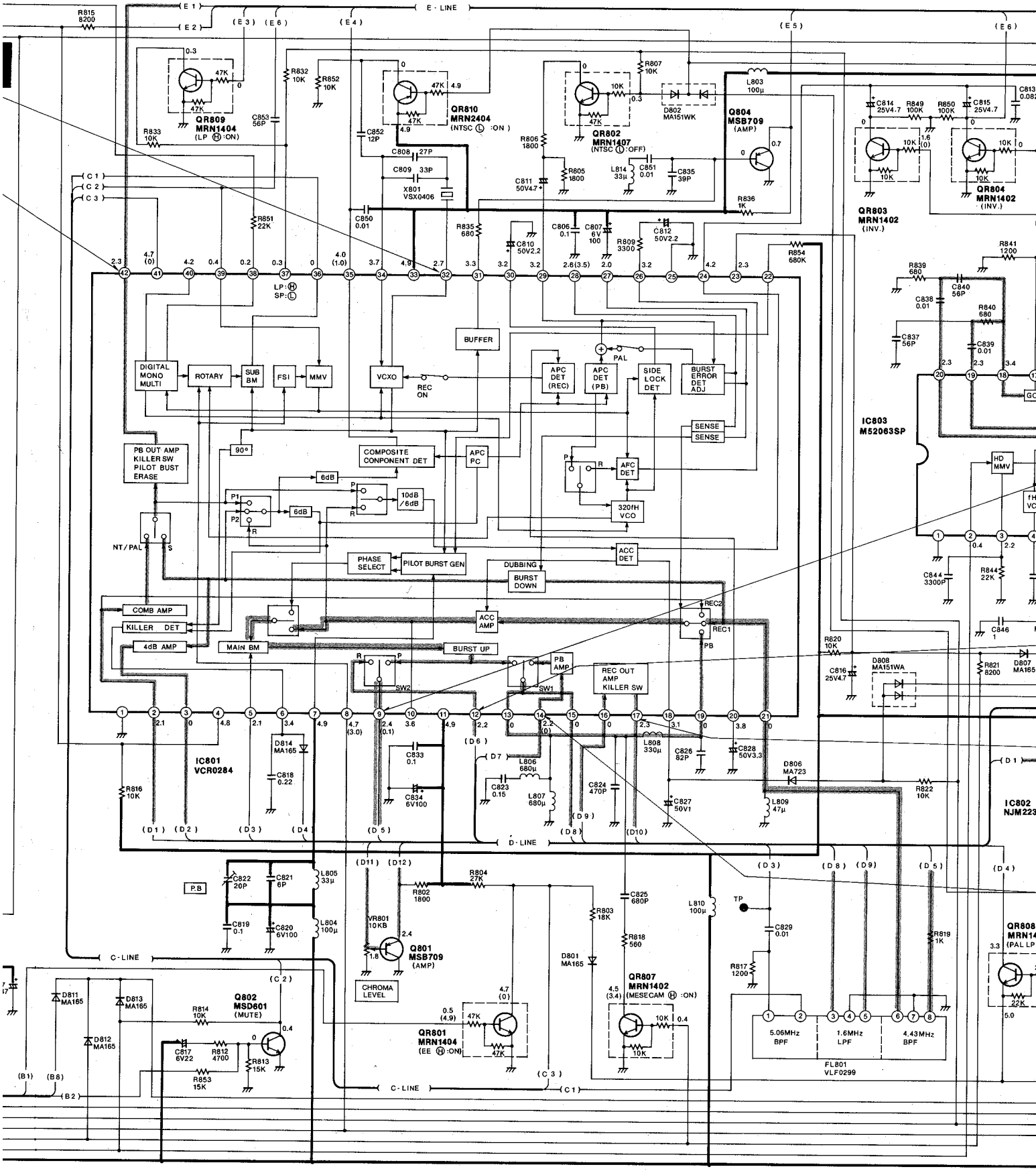


AM

MAIN SIGNAL PATH IN REC MODE — MAIN SIGNAL

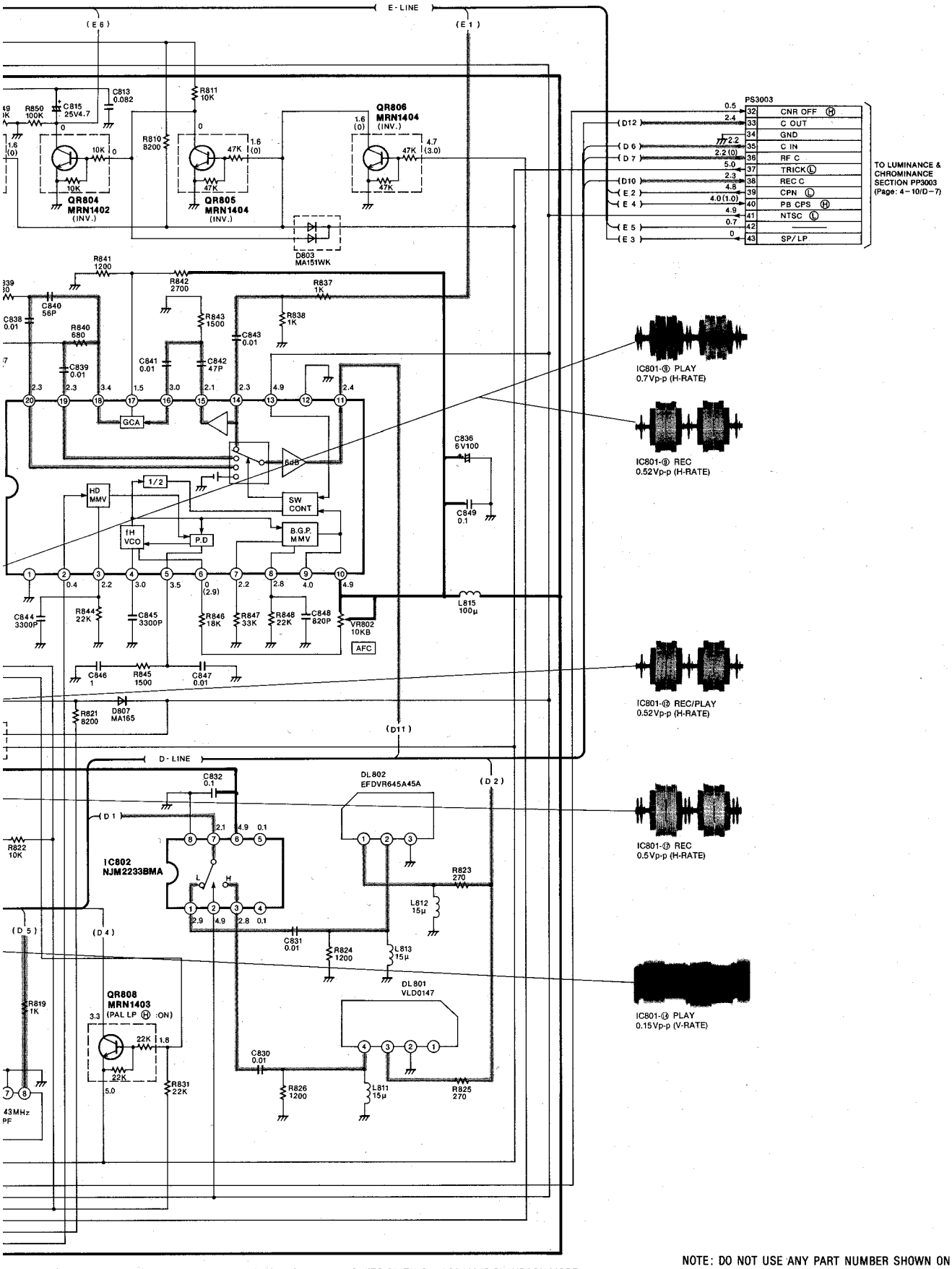


SIGNAL PATH IN PLAYBACK MODE



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

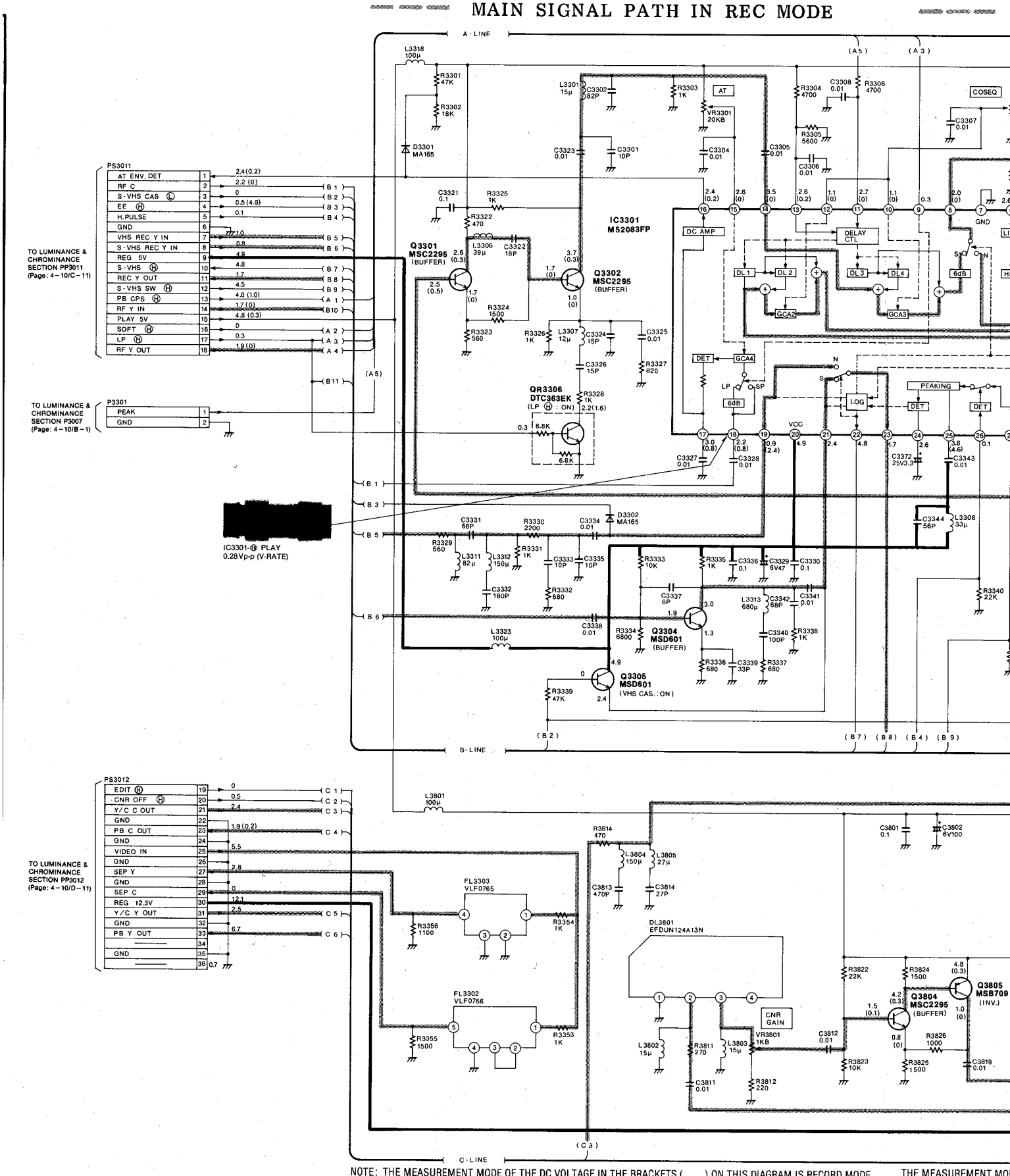
THE MEASUREMENT M
WITH PAL COLOUR SI



THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

7. SUB LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM

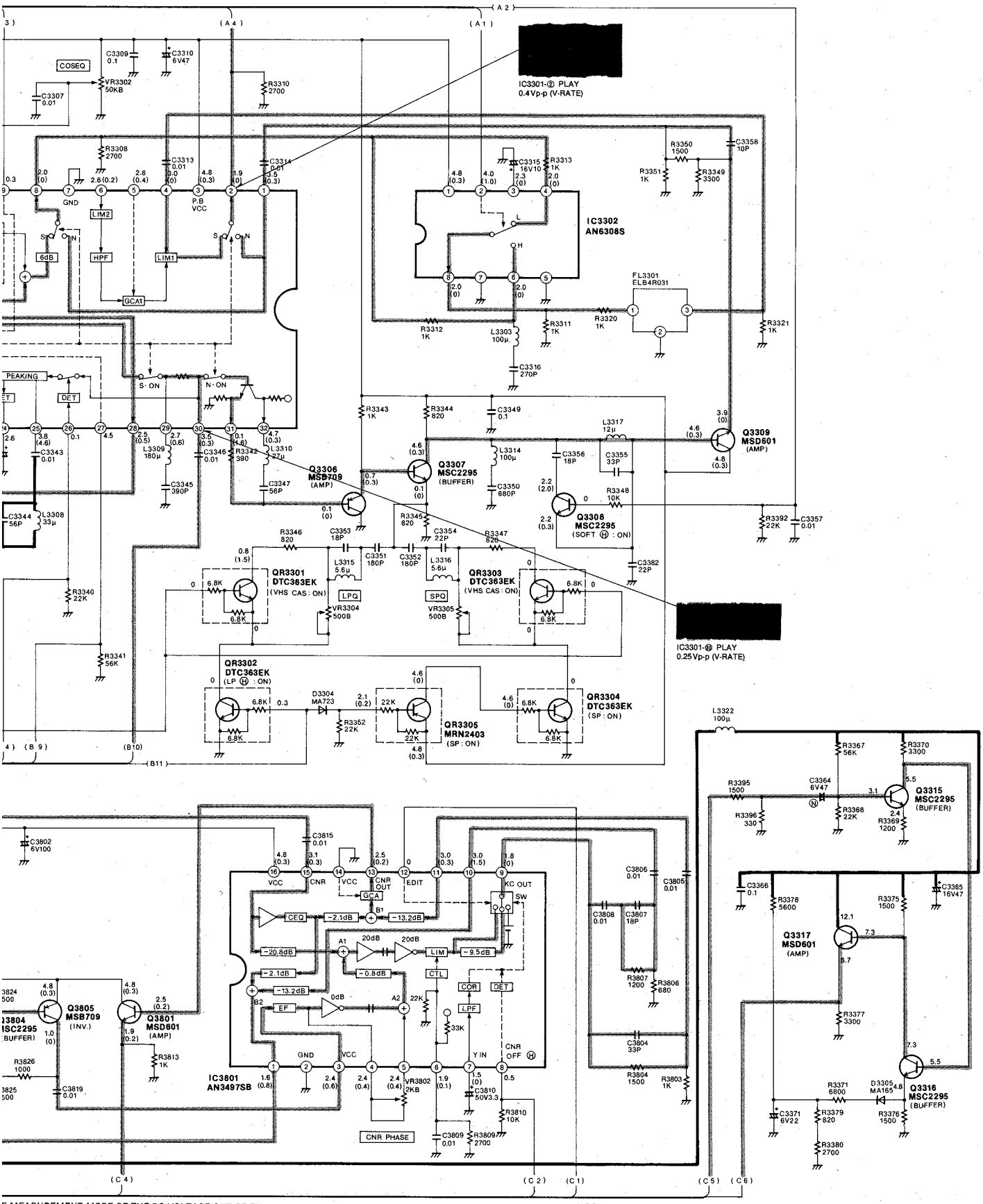


NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

THE MEASUREMENT MO WITH PAL COLOUR SIGN

1 2 3 4 5 6

MAIN SIGNAL PATH IN PLAYBACK MODE



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

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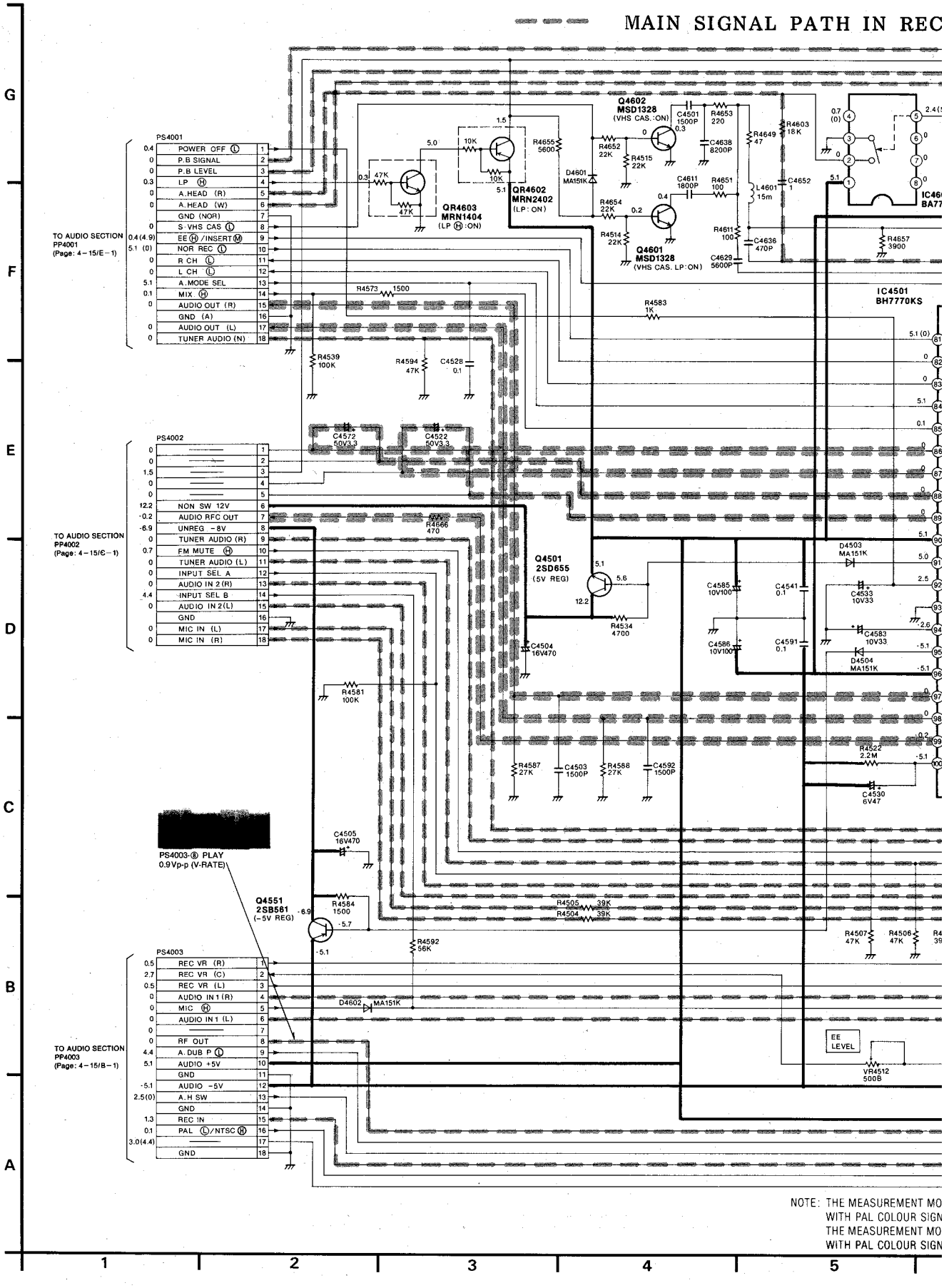
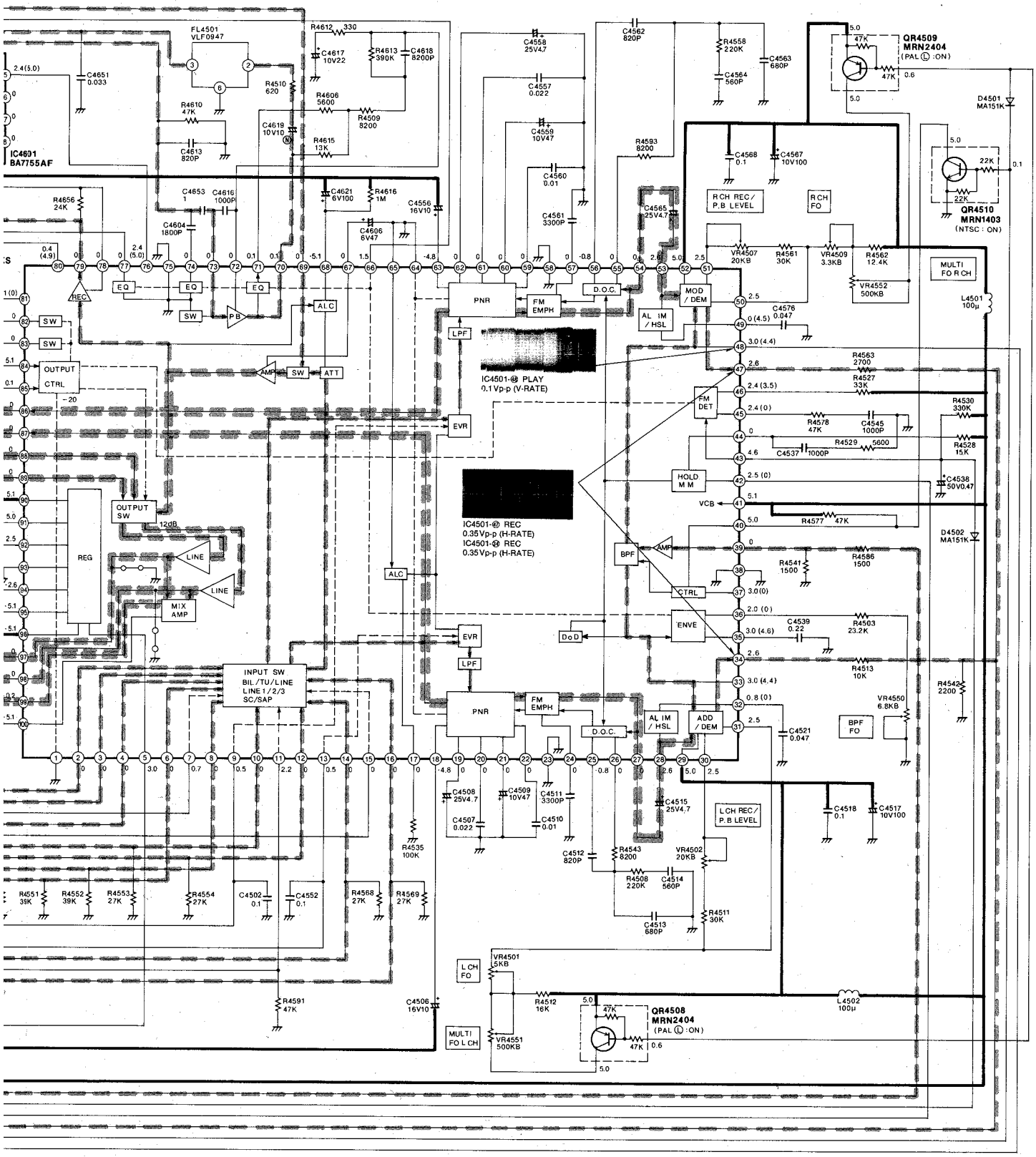
4-8. Hi-Fi AUDIO PACK SCHEMATIC DIAGRAM



EC MODE — — — MAIN SIGNAL PATH IN PLAYBACK MODE



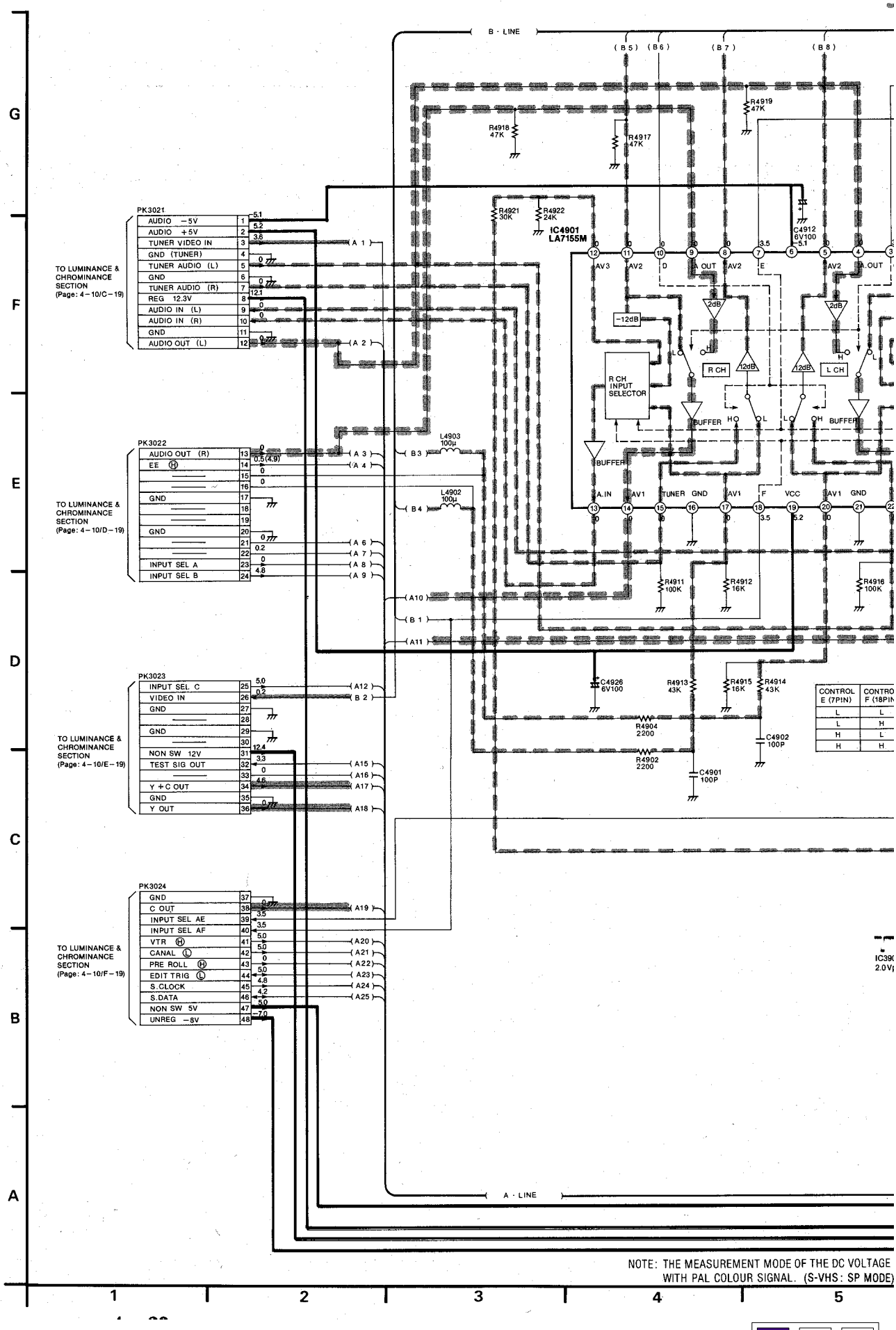
T MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE SIGNAL. (S-VHS: SP MODE)

T MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE SIGNAL. (S-VHS: SP MODE)

• LINE IN SIGNAL LEVEL... – 10dB 1kHz

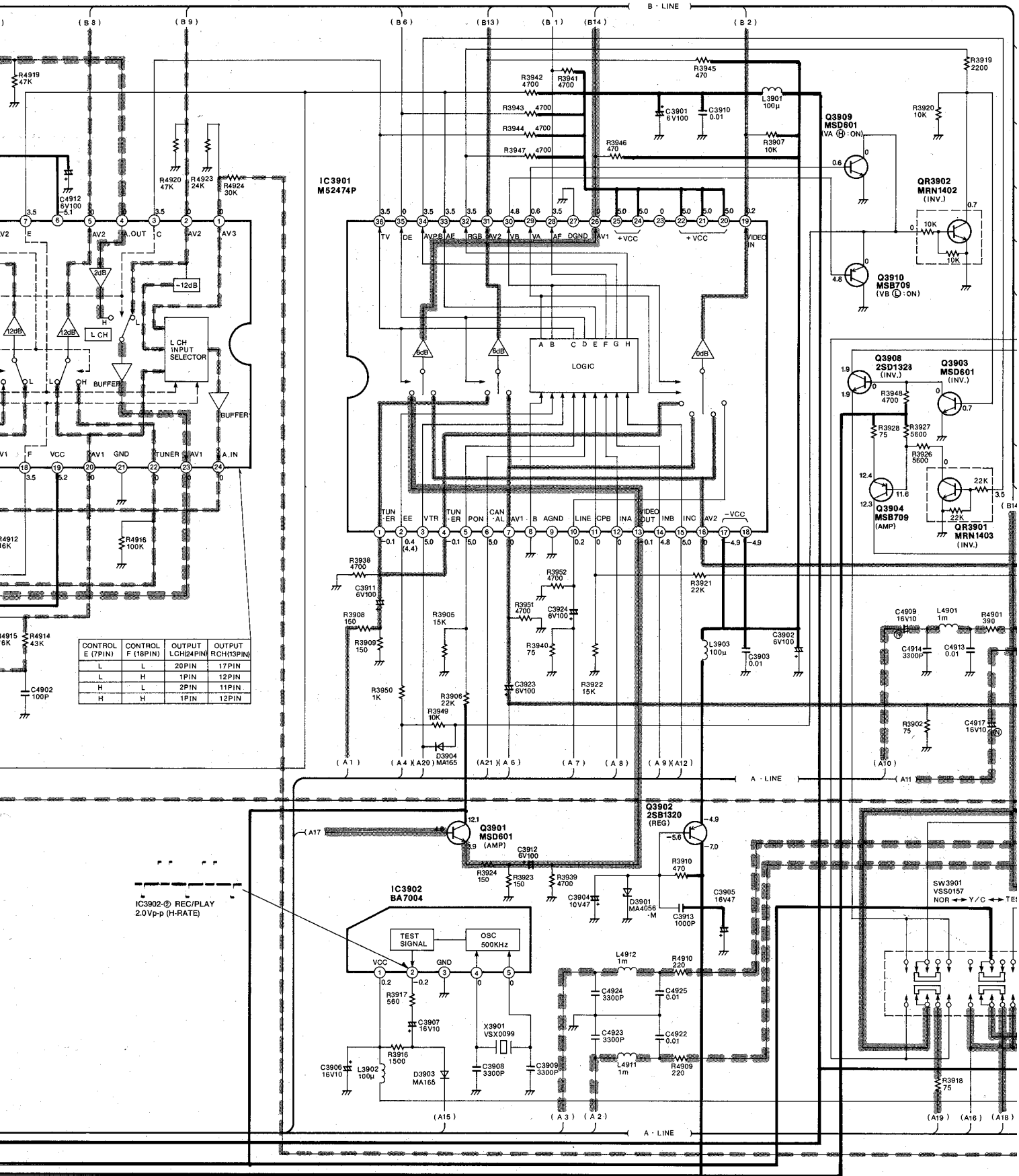
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-9. INPUT/OUTPUT PACK SCHEMATIC DIAGRAM



VIDEO MAIN SIGNAL PATH IN REC MODE — — — AUDIO MAIN S

VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE — — — AUDIO MAIN S



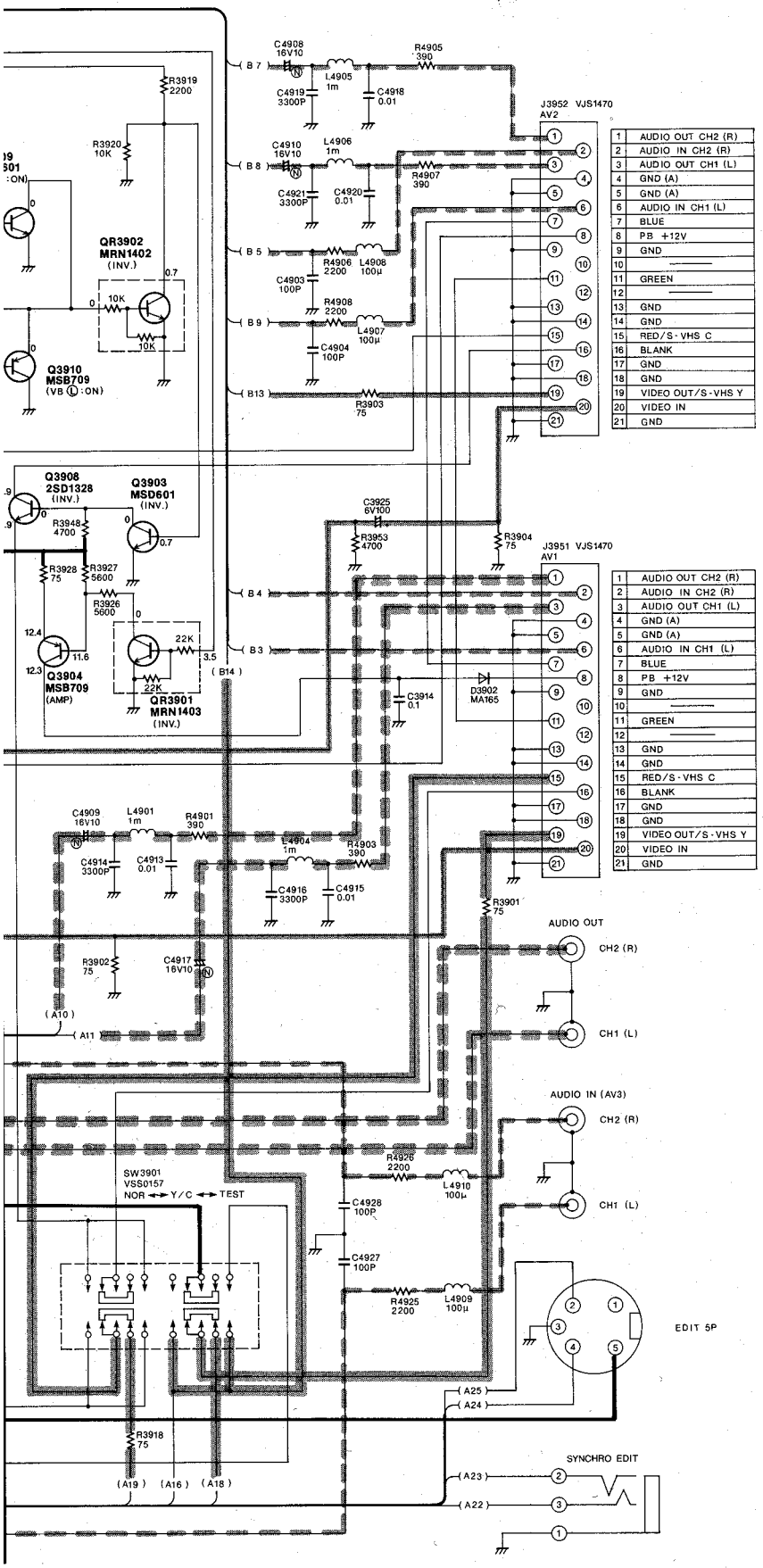
CONTROL E (7PIN)	CONTROL F (18PIN)	OUTPUT LCH(24PIN)	OUTPUT RCH(13PIN)
L	L	20PIN	17PIN
L	H	1PIN	12PIN
H	L	2PIN	11PIN
H	H	1PIN	12PIN

MENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE
OUR SIGNAL. (S-VHS: SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

AUDIO MAIN SIGNAL PATH IN REC MODE

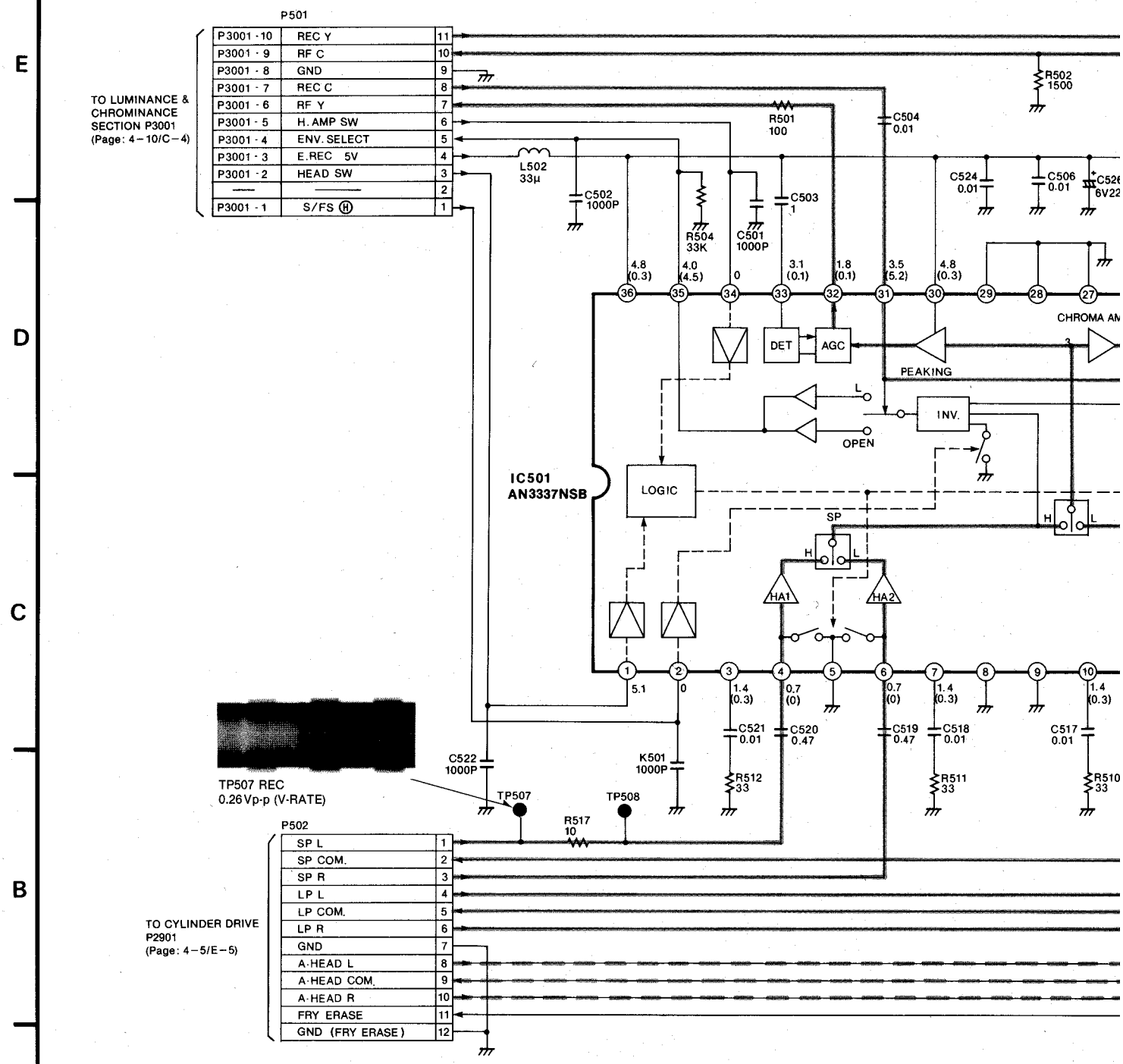
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE



AGRAM IS PLAYBACK MODE

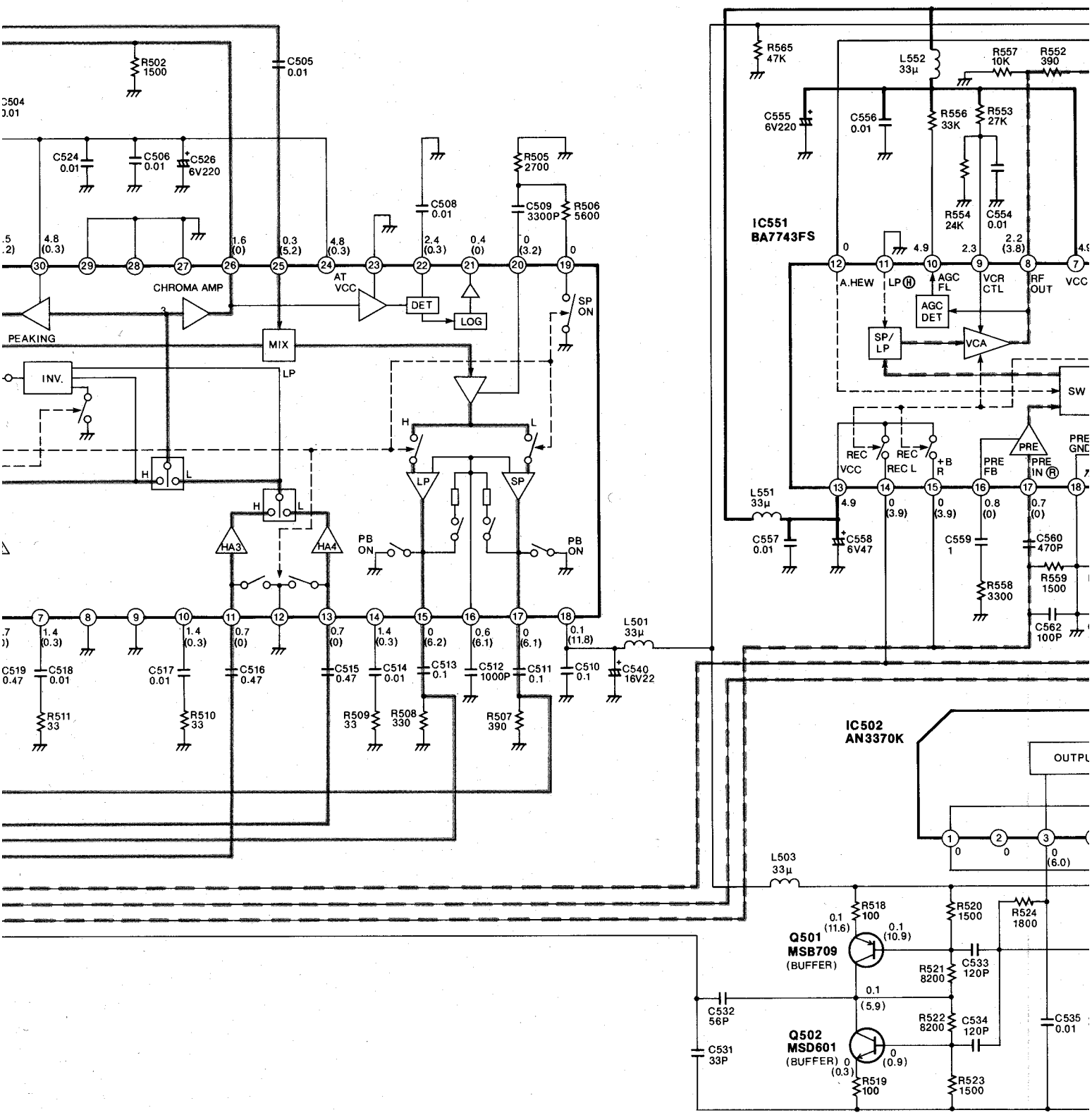
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-10. HEAD AMP SCHEMATIC DIAGRAM



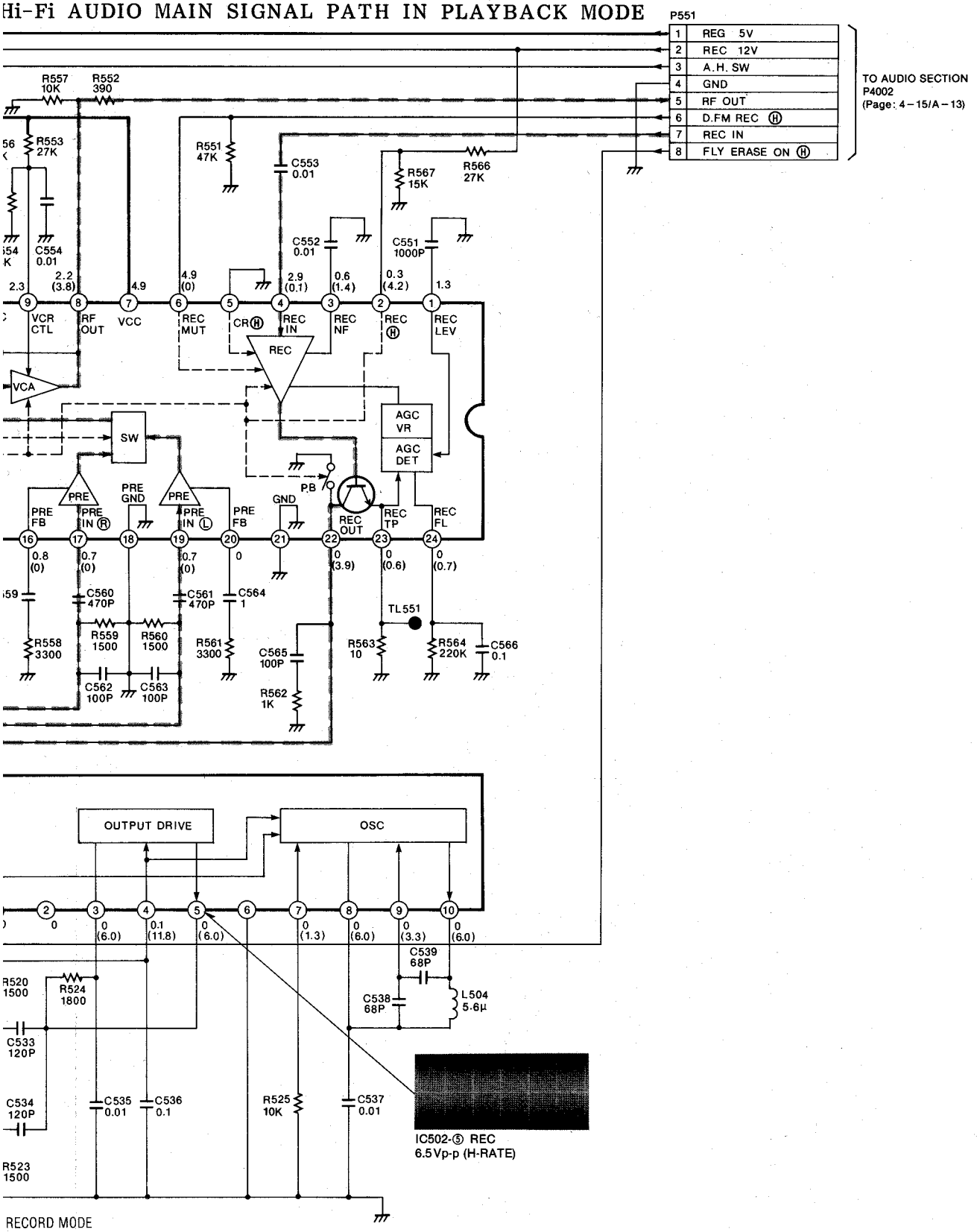
VIDEO MAIN SIGNAL PATH IN REC MODE — Hi-Fi AUDIO

VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE — Hi-Fi AUDIO



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

Hi-Fi AUDIO MAIN SIGNAL PATH IN REC MODE
Hi-Fi AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

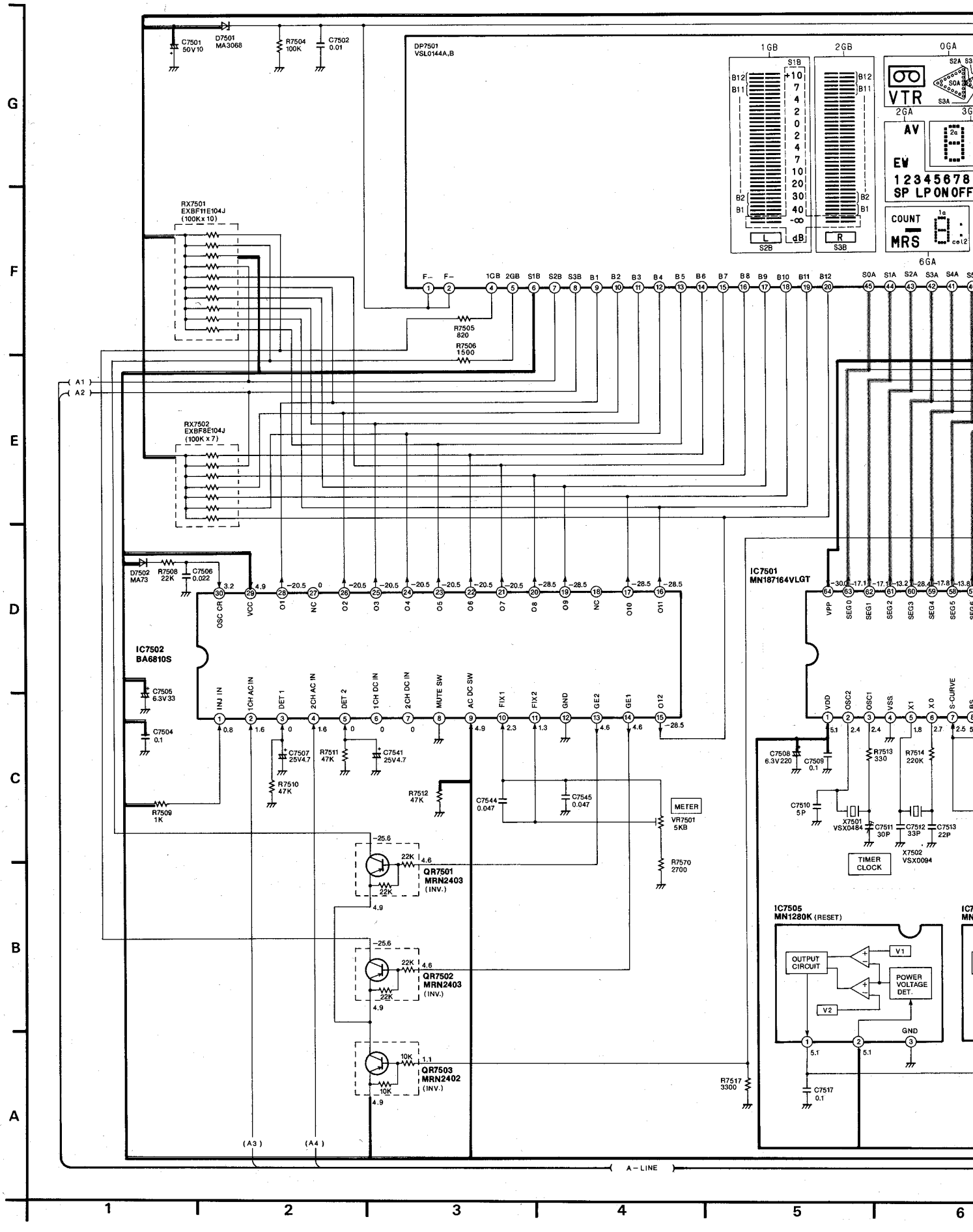


RECORD MODE

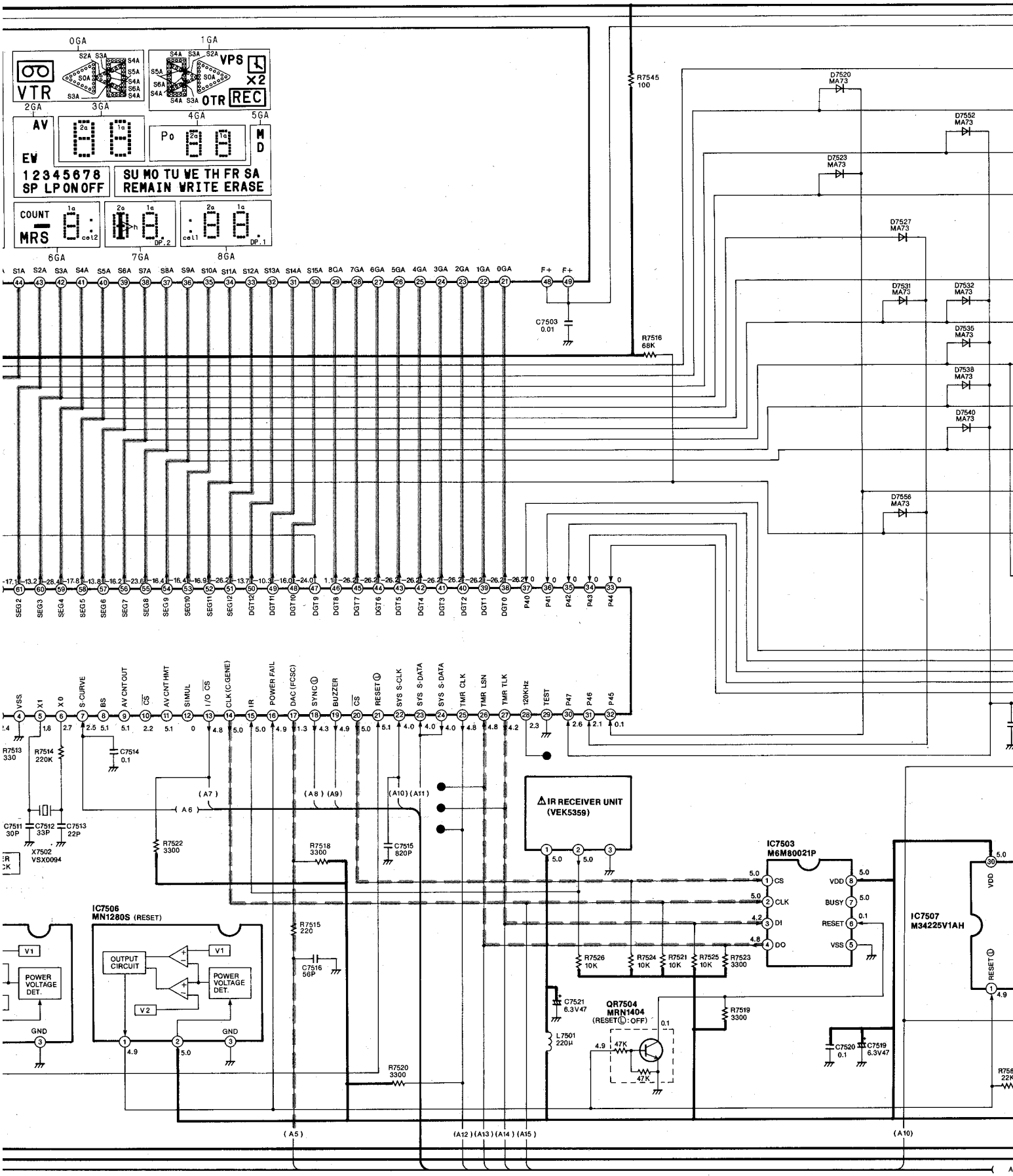
AYBACK MODE

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-11. TIMER & VR SCHEMATIC DIAGRAM

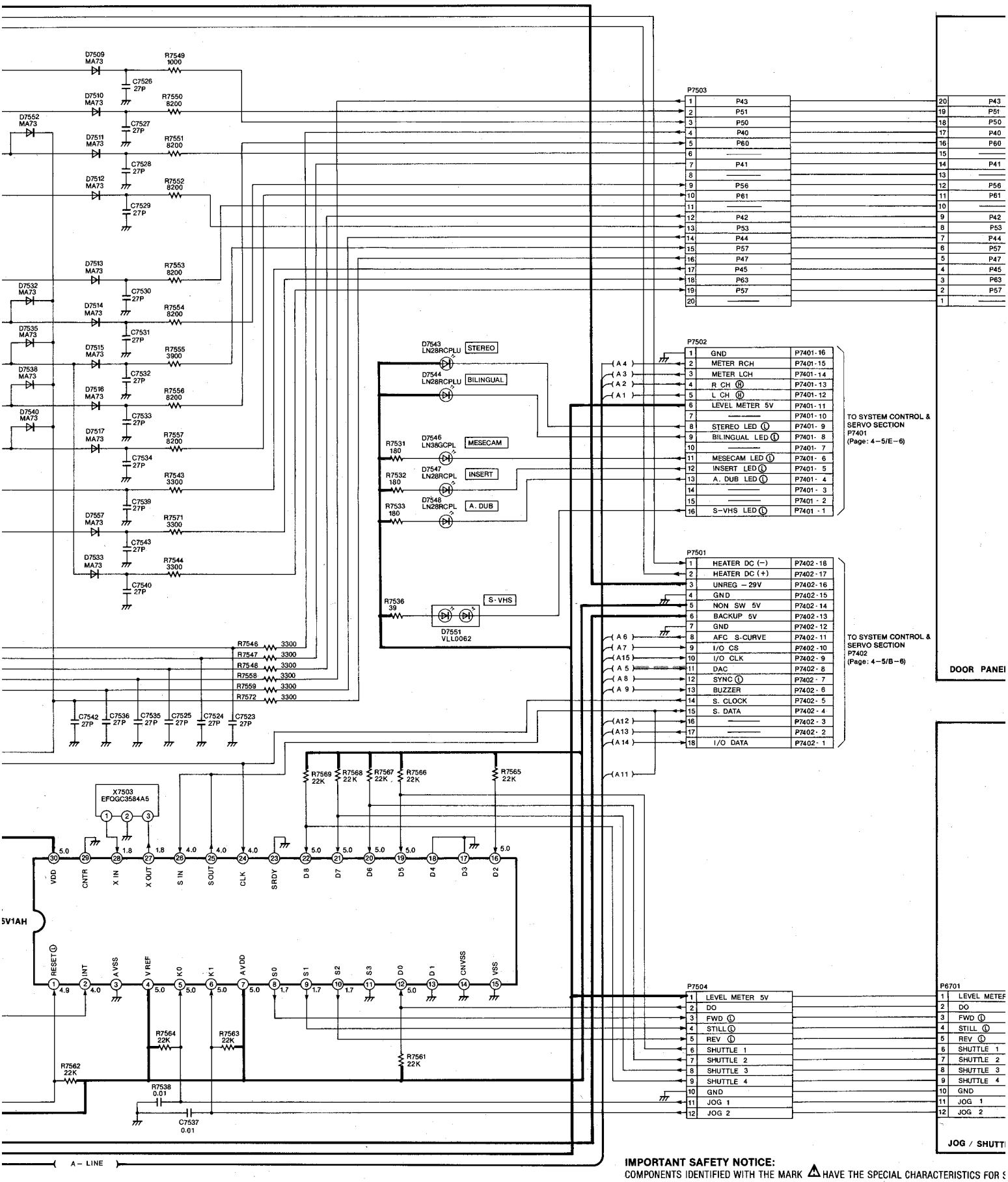


SEGMENT CONTROL SIGNAL　　GRID CONTROL SIGNAL　　TUNE C



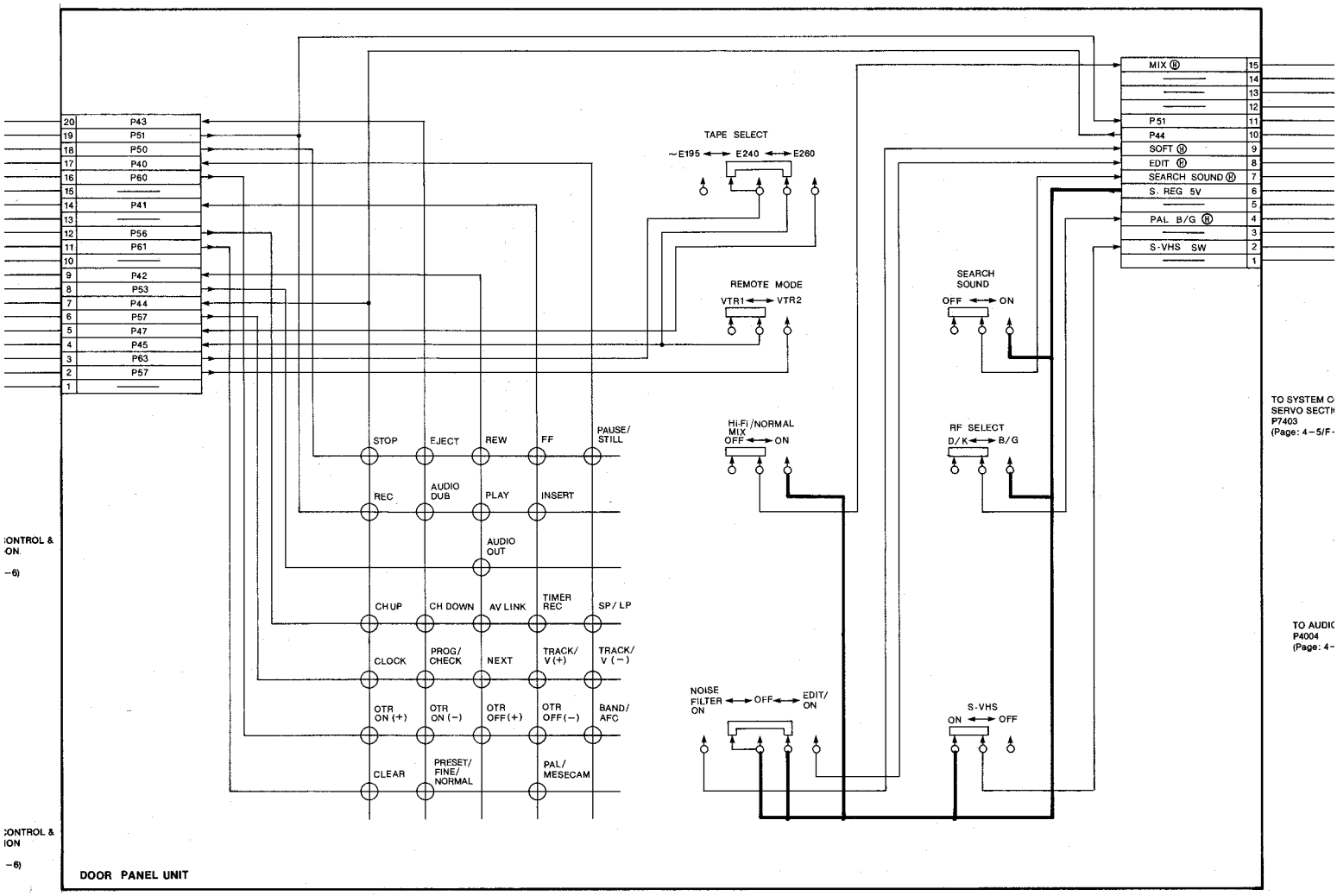
6　7　8　9　10　11

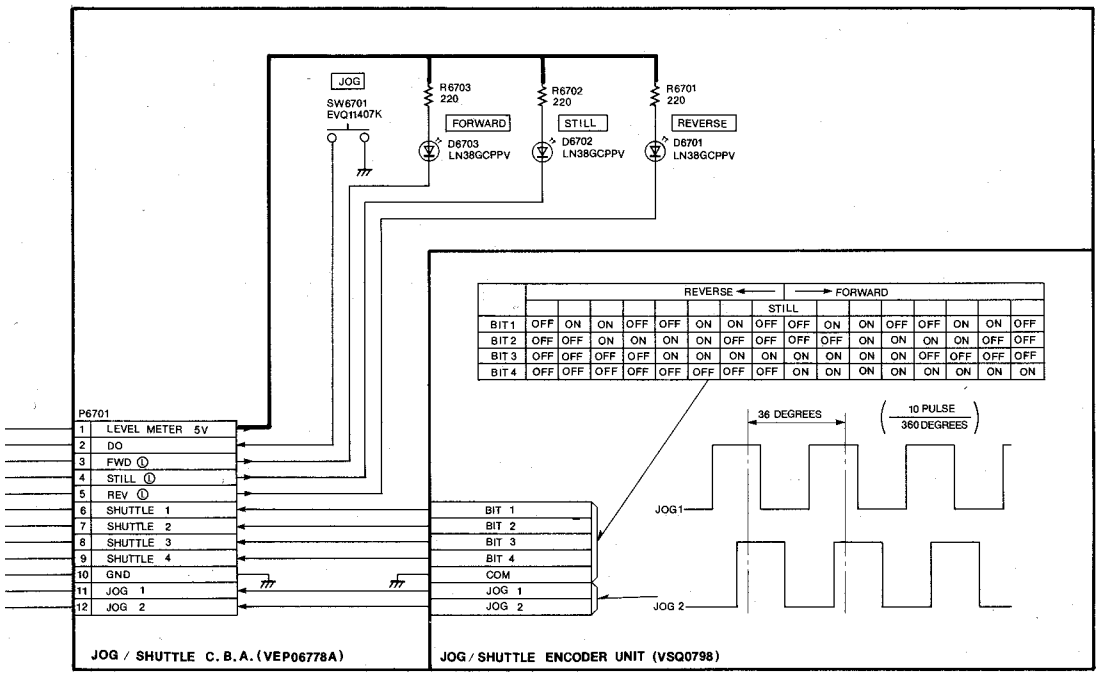
TUNE CONTROL SIGNAL



IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR S
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

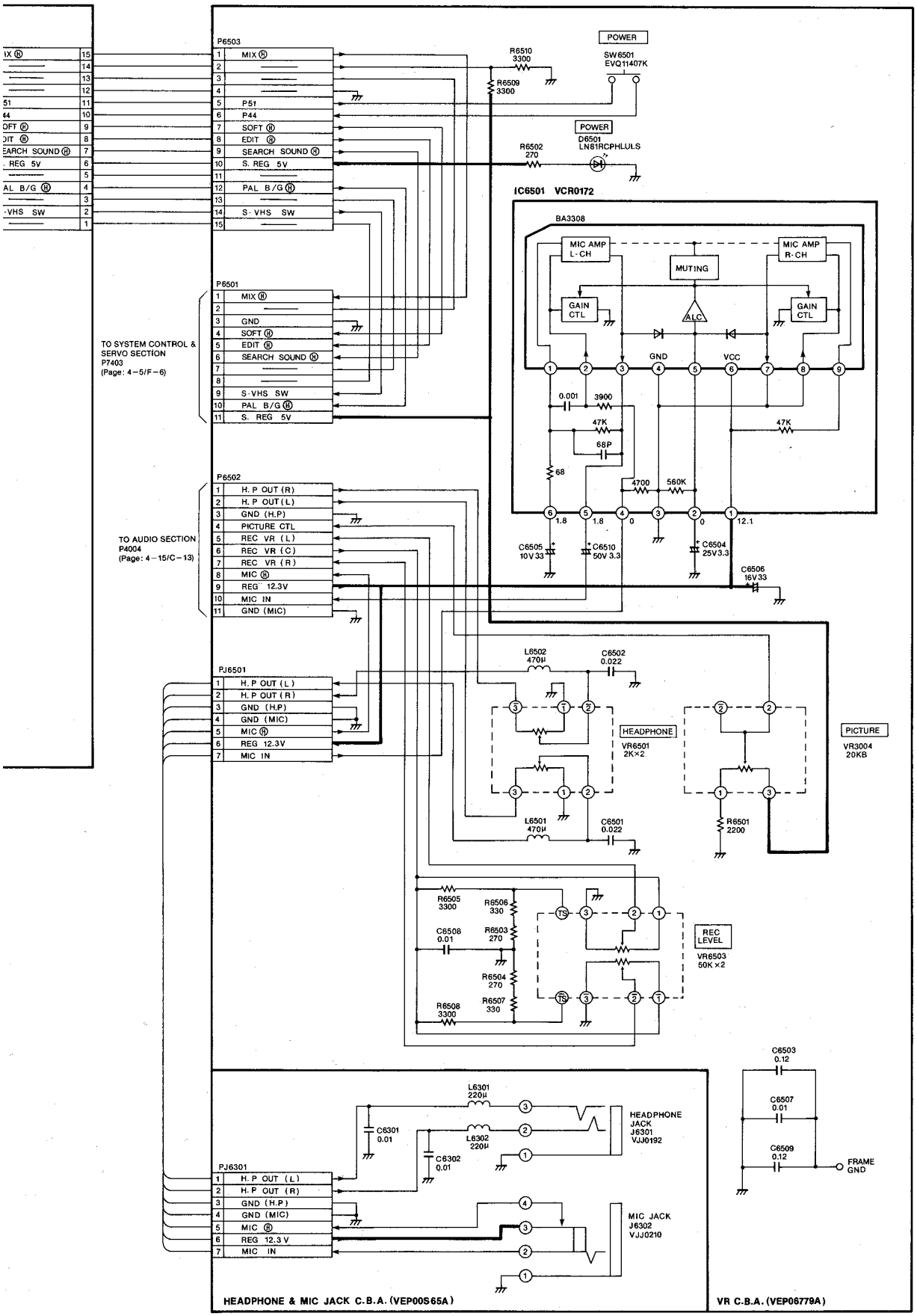
1 12 13 14 15 16





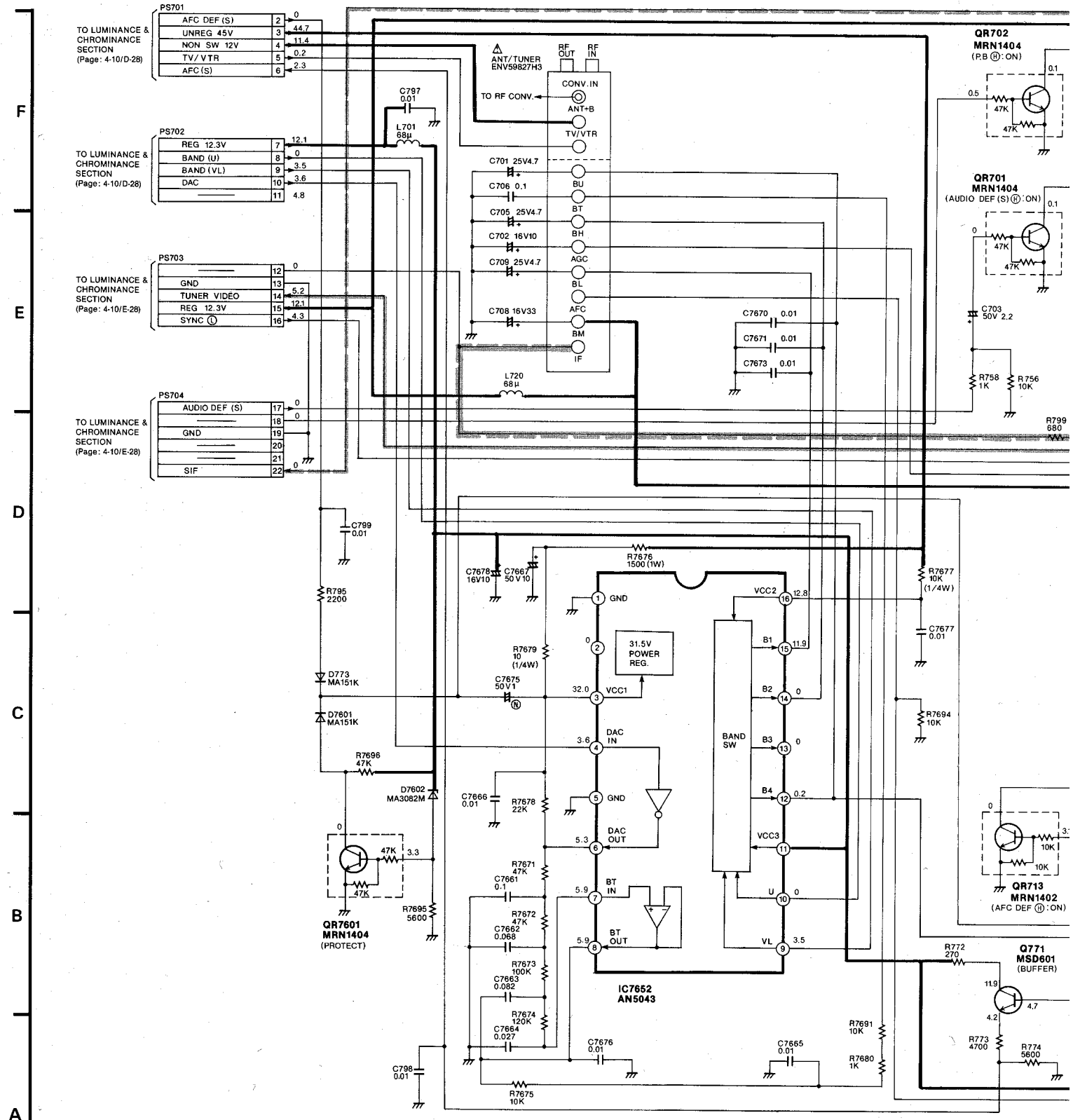
AL CHARACTERISTICS FOR SAFETY.
SAME TYPE.

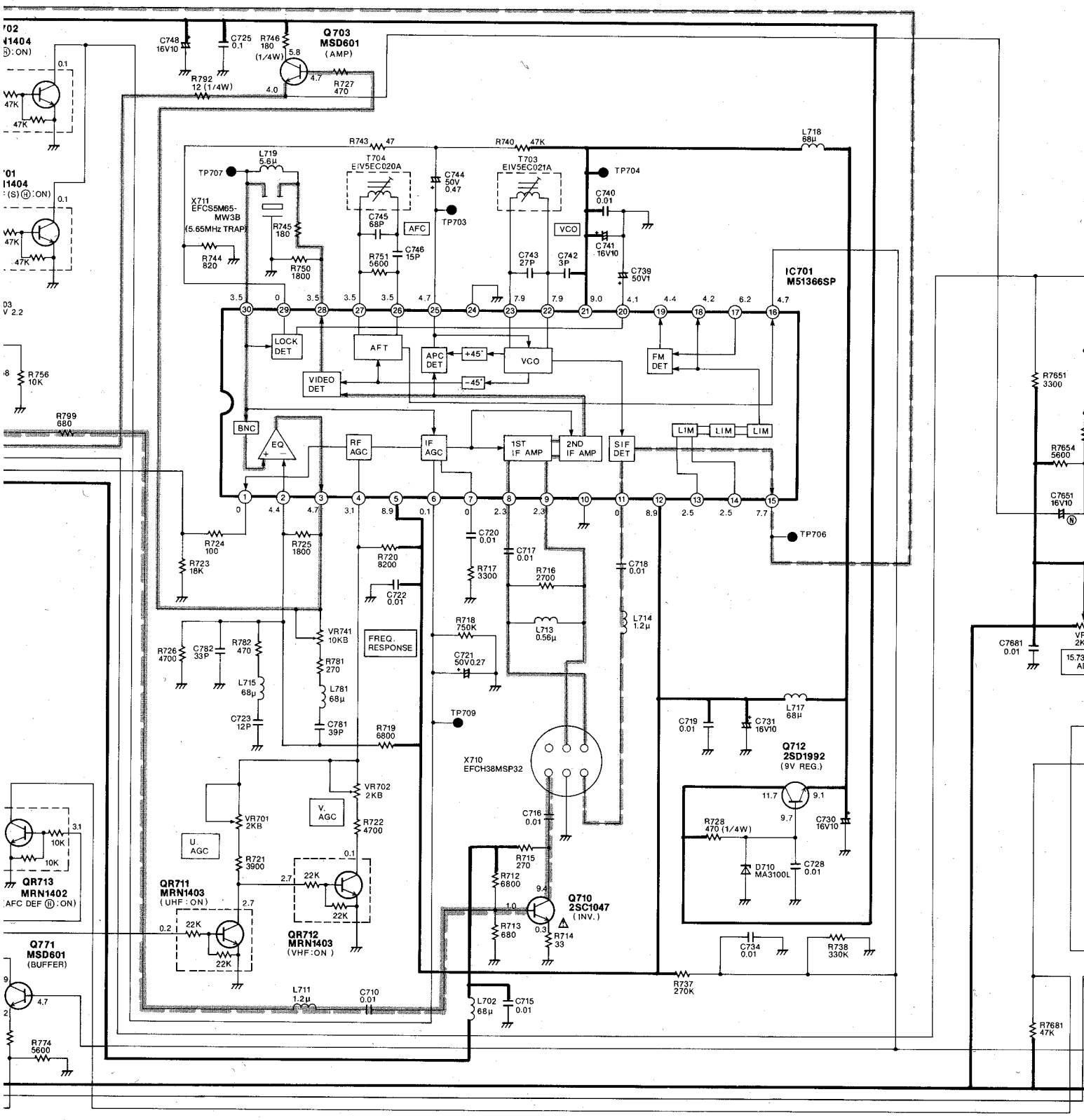
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE. (S-VHS: SP MODE)



NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-12. TV DEMODULATOR PACK SCHEMATIC DIAGRAM

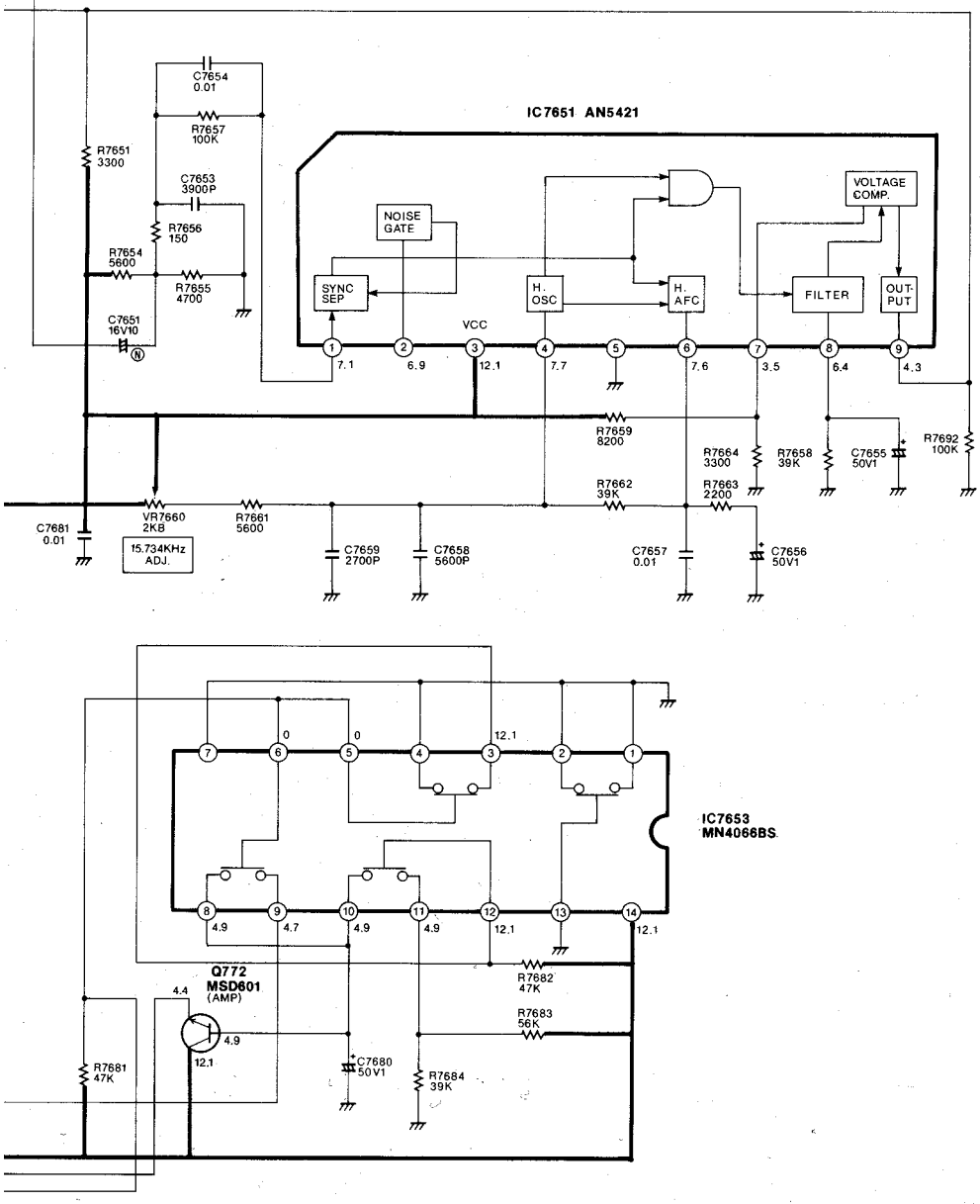




NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM

6 7 8 9 10

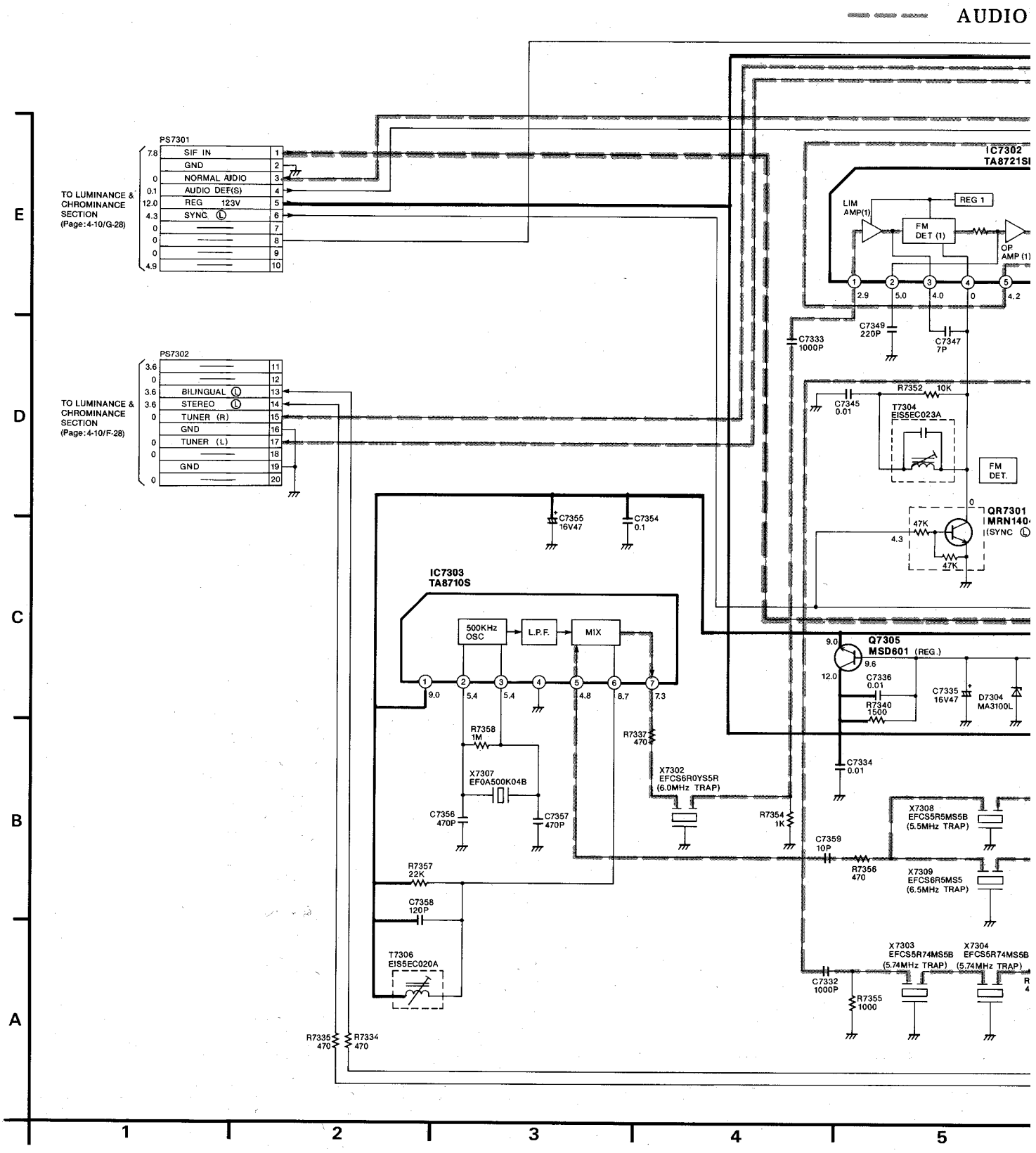
VIDEO SIGNAL PATH
AUDIO SIGNAL PATH



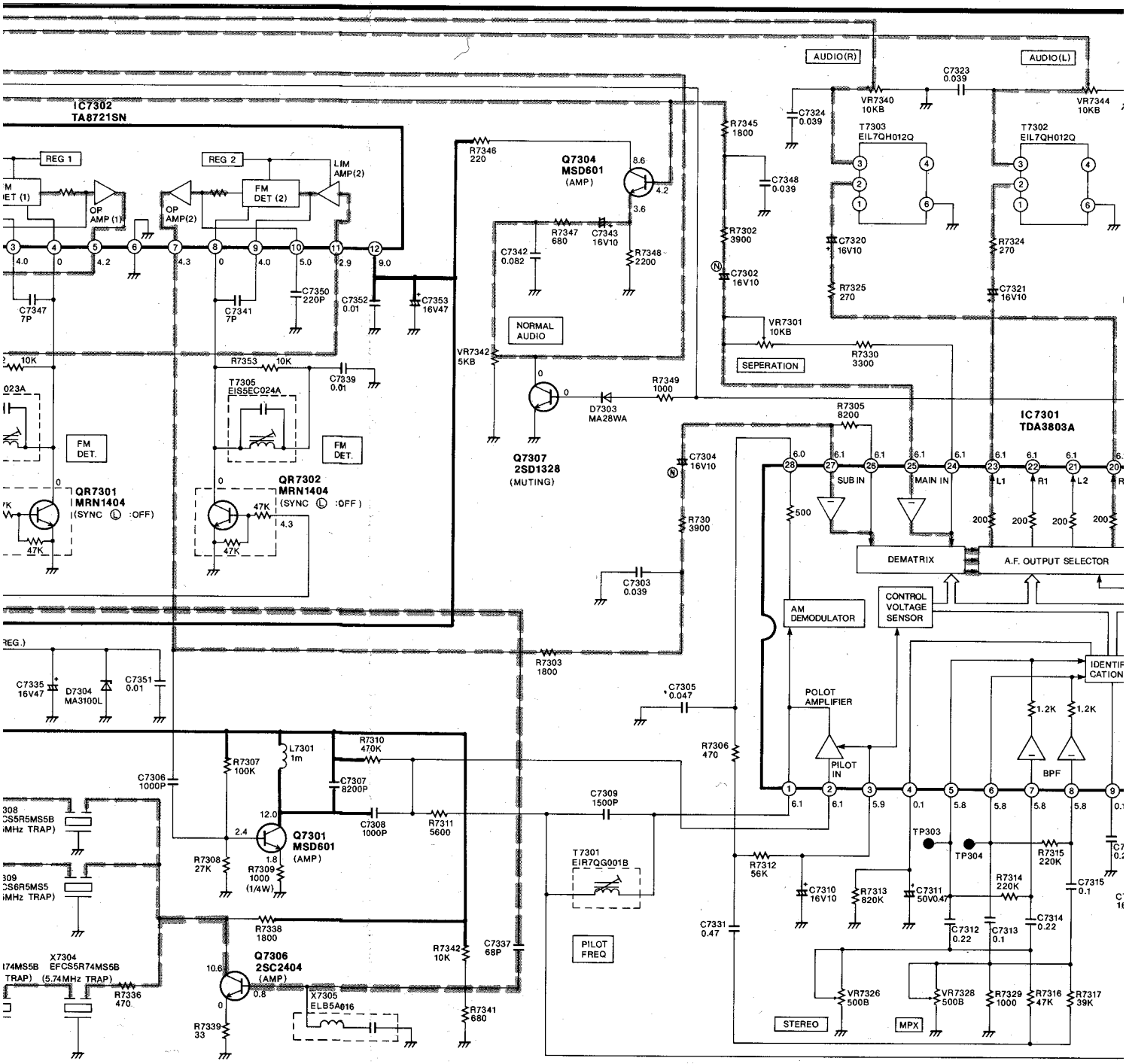
AGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-13. MULTI DECODER PACK SCHEMATIC DIAGRAM



AUDIO MAIN SIGNAL PATH — — — AUDIO SUB SIGNAL PATH

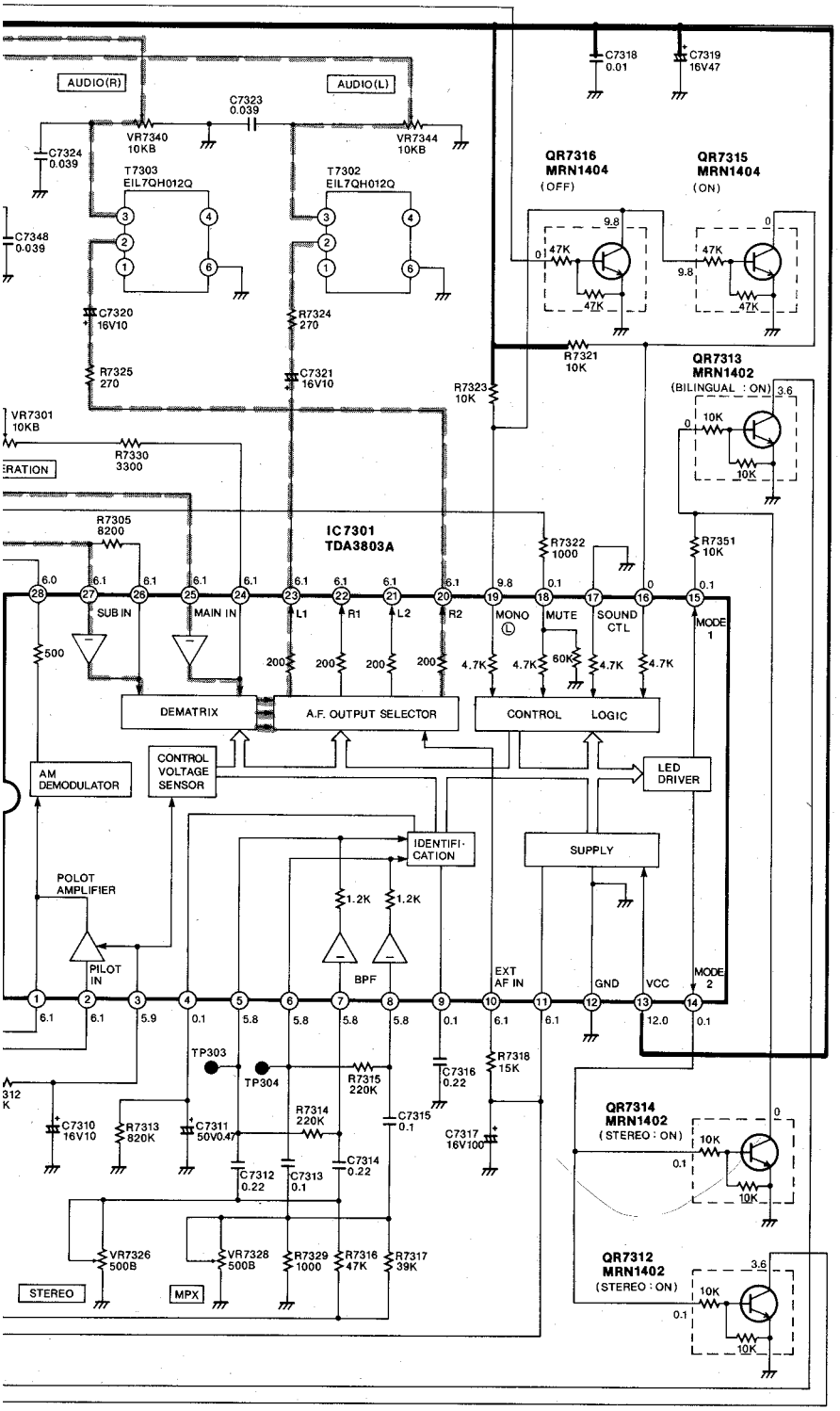


NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT U
ORDERING

5 | 6 | 7 | 8 | 9 | 10

;NAL PATH



AGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.